DEVELOPMENT OF A NEW O&M CLINICAL COMPETENCY EVALUATION TOOL AND EXAMINATION OF VALIDITY AND RELIABILITY EVIDENCE

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The goal of this study was to create an evaluation tool that would be the new standard for evaluating clinical competencies of interns in the field of orientation and mobility (O&M). Using results from previous research in this area, specific competency skills were identified and the O&M Clinical Competency Evaluation Matrix (CCEM) was developed. O&M university faculty were surveyed to gather content evidence. After revisions were made to the O&M CCEM, the evaluation tool was piloted with O&M clinical internship supervisors and validity and reliability evidence was examined. The combination of all the validity evidence supported the intended inferences. The content evidence showed that experts in the field agreed that the O&M CCEM as a whole was representative of the content area. The internal structure evidence showed that scores on the O&M CCEM could be interpreted as measuring clinical competency in relation to standard teaching skills, O&M specific skills, and advanced O&M instruction skills. The external structure evidence showed that scores on the O&M CCEM are related to scores on the ACVREP evaluation form. The practicality evidence showed that the tool is useful for measuring clinical competence. In addition, the internal consistency reliability evidence showed that there was consistency in ratings within dimensions and the inter-rater reliability evidence showed there was moderate consistency in ratings between supervisors.

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"Dance like no one is watching. Sing like no one is listening.

Love like you've never been hurt and live like it's heaven on Earth."

—Mark Twain

As I reflect on the journey that I took to get to this point, I realize just how long I have been waiting for this day. Seventeen years ago I told my parents I would one day get my doctorate and I can't believe the day has finally arrived. There were certainly times when I didn't think I could accomplish this task but with the support and guidance from numerous people, I achieved my dream.

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1.0 INTRODUCTION

Visual impairments and blindness create challenges in learning (e.g. Hatlen & Curry, 1987; Sacks, 1998); therefore, children and adults with this disability require instruction in specific skills (Hatlen, 1996). One such skill is the ability to travel or move through the environment as independently as possible. In order to achieve this skill, specialized instruction in the techniques of orientation and mobility (O&M) is needed.

Orientation is defined as "the ability to use one's remaining senses to understand one's location in the environment at any given time" and mobility is defined as "the capacity or facility of movement" (Jacobson, 1993, p. 3). Griffin-Shirley, Kelley, Murray, & Lawrence (2006) stressed the importance of O&M stating, "effective orientation and mobility skills can assist [individuals with visual impairments] in the pursuance of their life goals, improvement in their quality of life and successful integration into society" (p.3).

O&M specialists are the professionals who provide the instruction necessary to acquire effective O&M skills. O&M instruction is considered a "science" and an "art" (Jacobson, 1993). The O&M specialists follow a prescribed sequence of assessment, planning, and instruction that is tailored to each client. Instruction focuses on using one's remaining senses, developing spatial concepts, understanding environmental regularities, learning formal O&M techniques, and using resources and technology to travel efficiently (Griffin-Shirley, et al., 2006). This is considered the "science" of O&M (Jacobson, 1993). However, due to the unique travel and visual needs of

persons with visual impairments, O&M specialists must also possess perceptive and intuitive skills. They must perceive potentially dangerous situations when traveling in a given environment, constantly monitor their clients' safety, and know when to intervene if their clients become disoriented. This is considered the "art" of O&M instruction (Jacobson, 1993).

Current federal legislation entitles individuals with visual impairments to receive these specialized services in order to meet the educational and rehabilitation needs necessary to be independent and contributing members of society. The Rehabilitation Act of 1973 provides financial assistance to states who offer vocational rehabilitation services, including O&M training, to individuals with disabilities in order to prepare them for employment (29 U.S.C.A. § 723 (a)(11)). The Individuals with Disabilities Education Improvement Act of 2004 (IDEA) addresses the educational needs of children with disabilities and entitles those with visual impairments to related services, including instruction in O&M (20 U.S.C. §1400-82). According to the United States Department of Education, these O&M services must be "provided by trained and knowledgeable personnel" (U.S. Department of Education, 2000, p. 36592).

It is important to identify the skills and competencies necessary to be considered "trained and knowledgeable". Without the identification of these competencies, the safety of others could be at risk and standards of care may not be achieved. This is particularly true in the field of O&M. Due to the uniqueness of O&M instruction, O&M specialists must be able to respond to moment-to-moment shifts that characterize teaching in complex and ever changing environments. Visual conditions, personality traits, confidence levels, and physical abilities are just a few examples of the ways in which individuals with visual impairments can vary. The O&M specialist must be able to design appropriate lessons tailored to the client's needs and

abilities, adapt the lessons, intervene appropriately, monitor safety, and facilitate independence (Academy for Certification of Vision Rehabilitation and Education Professionals, 2001).

Past research examining the competencies of O&M specialists has focused primarily on identifying the academic and clinical competencies and determining how essential those competencies are in the training of O&M specialists (Eichorn & Vigoroso, 1975; Crouse & Kappan, 1975; Kimbrough, 1980; Uslan, Hill, & Peck, 1989; Weiner & Siffermann, 2000). Although these studies have shed some light on the importance of the competencies, few researchers have examined the criteria for *assessing* those competencies. Those studies that have examined the evaluation of clinical competencies have focused only on observation skills or instructor positioning (Geruschat & De L'Aune, 1989; Zebehazy, Zimmerman, & Fox, 2005; Zebehazy, Renshaw, Zimmerman, Fox, & D'Andrea, 2008; Renshaw, Zimmerman, & Zebehazy, 2009). To date, no research has investigated the validity or reliability of an evaluation tool that assesses the clinical competencies of O&M specialists.

1.1 RESEARCH QUESTIONS

This study materialized because of the absence of available validity and reliability evidence and inadequacy of the current instrument used to evaluate clinical competencies in the field of O&M. The Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP), the organization that certifies O&M specialists, provides the standards and competencies O&M specialists must demonstrate in order to receive O&M certification. Graduates from approved O&M university preparation programs must demonstrate competency in 13 academic areas and seven clinical areas (ACVREP, 2001). The tools used to assess these skill areas have never been

examined for validity and reliability. Of particular concern is the current method for measuring clinical competencies. At the completion of the O&M internship the clinical supervisor is asked to reflect on the performance of the intern and simply decide if seven clinical competency areas were “met” or “not met” using a checklist format. The subjectivity of this assessment form and the lack of defined competency skills prompted the creation of a new O&M Clinical Competency Evaluation Matrix (CCEM). This paper discusses the creation of that tool and examines the following questions in order to collect validity and reliability evidence:

Q1: Are the competency skills on the O&M CCEM representative of the content area it is designed to measure? Are any competencies skills missing?

Q2: Are competency skills within the seven clinical competency domains highly related to other competency skills within the same domain?

Q3: Is there a relationship between scores on the O&M CCEM and the ACVREP clinical competency evaluation form?

Q4: Is there consistency in the rating for each item and total test score? Do all items measure various aspects of clinical competency?

Q5: Is there consistency in the rating between raters?

Q6: Is the O&M CCEM a practical tool to use to evaluate the clinical competencies of O&M interns?

1.2 DEFINITION OF TERMS

The following terms are mentioned throughout this dissertation and are important to understand:

1. *Academic Competencie*s: This is the subject matter content O&M students are expected to learn in O&M university preparation programs. There are 13 academic competency areas and they are evaluated using a multiple-choice exam that is administered by the Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP).
2. *Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP):* This is the organization that offers national certification to O&M specialists after graduation from an O&M university personnel preparation program.
3. *Clinical Competencies:* These are the skills related to the practice of O&M and pertain to communication, assessment, instruction, and professional abilities. There are seven clinical competency areas, and they are evaluated by the clinical internship supervisor at the completion of the O&M internship.
4. *Content Evidence:* This category of validity evidence allows the researcher to determine the extent to which a group of experts in a particular content area agree that an instrument measures what it is designed to measure (Aiken, 1996). It may also assess the extent to which any unintended constructs are measured, as well as whether any relevant elements of the construct are not represented in the instrument.
5. *External Structure Evidence:* This category of validity evidence examines the relationship between test scores and external variables (Nitko, 2004).
6. *Internal Consistency Reliability:* This type of reliability examines the consistency or homogeneity of item responses across the set of test items (Nitko, 2004).

7. *Internal Structure Evidence:* This category of validity evidence describes the interrelationships among the test items, and the relationship between the items and test scores that are reported (Nitko, 2004).
8. *Inter-rater Reliability:* This type of reliability refers to the consistency of ratings between two (or more) independent raters (Gay, 1992).
9. *O&M Clinical Internship Supervisors:* These individuals are practicing O&M specialists who serve as supervisors for O&M interns during their internship.
10. *O&M Interns:* These individuals have completed all the necessary coursework at an O&M university preparation program and are currently completing their internship requirements.
11. *O&M Specialists:* These individuals have graduated from an O&M university preparation program and provide O&M services to persons with visual impairments.
12. *O&M Students:* These individuals are currently completing their coursework requirements at an O&M university personnel preparation program.
13. *O&M University:* These are universities that offer O&M certification programs that were invited to participate in this study. The invitation was extended to 17 universities in the United States, one in New Zealand, and one in Canada.
14. *Practicality Evidence:* This category of validity evidence is related to efficiency, practicality, usefulness of an assessment tool and results that are reported (Nitko, 2004).

2.0 LITERATURE REVIEW

2.1 HISTORY OF THE PROFESSION

Prior to the 20th century, individuals with visual impairments or blindness did not receive instruction in the techniques needed to travel independently (Bledsoe, 1997). They often created their own methods or techniques to ambulate through the environment or relied on others for assistance (Bledsoe, 1997). Regardless of their preferred travel technique, the use of an assistive device, such as a cane or dog, was shunned by the public (Welsh, 2005). It wasn't until the 20th century that an organized O&M training program was attempted in the United States. After prior success of such programs in Europe, the Seeing Eye, Inc. instituted a mobility training program with the use of dog guides in 1929 (Bledsoe, 1997). This was followed in the mid-1940s by formal instruction in the use of a white cane at Valley Forge Army Hospital (Koestler, 1976; Bledsoe, 1997).

As a result of injuries suffered in World War II, wounded soldiers with visual impairments began arriving at Valley Forge Army Hospital and Avon Army Hospital in 1944 (Bledsoe, 1997; Welsh 2005). At Valley Forge Hospital, blinded veterans received medical care and surgical procedures related to their vision loss (Welsh, 2005). The overwhelming task for the staff was determining what services to provide to these newly blinded men while they were healing from their medical treatment; until Dr. Richard Hoover, an employee at Valley Forge,

suggested that one-on-one instruction in “foot travel” should be the focus (Hoover, 1950; Bledsoe, 1997; Welsh, 2005).

Hoover encouraged the blinded veterans to use tools to help them travel safely (Welsh, 2005). At first, a short orthopedic cane was used, followed by the formal invention of a long cane a few years later (Bledsoe, 1997; Welsh, 2005). In order to develop specific long cane techniques, Hoover blindfolded himself to experiment and determine the most appropriate cane movements and foot placements to travel safely and efficiently (Bledsoe, 1997). Hoover’s techniques focused on keeping the hand holding the cane centered in front of the body and alternating tapping the cane tip in front of each foot before stepping (Welsh, 2005). Sighted “orientors” were hand-selected to receive training on how to instruct the soldiers to use these techniques; and thus the concept of the modern O&M specialist was born (Bledsoe, 1997).

While Valley Forge was focusing on the use of Hoover’s basic cane techniques, instruction at Avon Army Hospital was focusing on the use of other senses to travel (Welsh, 2005). For example, veterans were taught to use sound and reflected sound waves to perceive if an obstacle was present instead of using a cane to detect obstacles (Bledsoe, 1997). In fact, the use of a cane, or any assistive device, was discouraged and even forbidden (Welsh, 2005). The goal at Avon was to train veterans to adjust to their blindness through instruction in vocational skills and traveling using only their senses (Bledsoe, 1997; Welsh, 2005).

Although the techniques at both Valley Forge and Avon offered the blinded soldiers a method of travel and the hope for independence, the two techniques had their flaws. At Valley Forge, the complicated and detailed techniques were presented all at once instead of being broken down into manageable parts and allowing mastery of one skill before moving on to the next. In addition, instruction did not focus on the use of other senses to understand one’s position

in space (Welsh, 2005). At Avon, soldiers were taught to understand the environment by the way things sounded and felt; however this technique had its flaws too. Using reflected sound and estimating the distance traveled in order to find a destination did not adequately protect the veterans from harm and was not a reasonable technique to use in a real world environment (Welsh, 2005). One blinded veteran, Russell Williams, was a patient at both hospitals and noticed the potential benefits and flaws of the different techniques (Welsh, 2005).

Williams was blinded in the war and was sent to Valley Forge in the fall of 1944. At Valley Forge, he first learned to use an orthopedic cane to travel short distances within the facility; however, the inadequate length of the cane lead to missed detection of objects and drop-offs (Welsh, 2005). After several months, he was transferred to Avon where he was asked to put his cane away and instead, travel in a more natural way by using his senses. In the fall of 1945, Williams returned to Valley Forge as an employee. By this time, Hoover had invented the long cane and instructed Williams in its use. Through trial and error, Williams found that the combination of the systematic use of the long cane *and* the use of his senses lead to greater success in traveling efficiently, safely, and independently in all environments (Welsh, 2005). As stated by Williams, “the security of knowing what was on the ground ahead of me gave me more of an opportunity to use my hearing and my other senses” (Welsh, 2005, p. 14). These concepts eventually lead to what professionals in the field know as “orientation and mobility” (O&M).

In 1947, Hines Veterans Administration Hospital opened its doors to serve the needs of blinded soldiers and taught them this combined concept of O&M (Bledsoe, 1997; Welsh, 2005). Six O&M specialists were hired to provide training to the soldiers. Given the newness of the profession, the candidates were selected more for their compassion and ability to communicate with others than past experience or employment history (Bledsoe, 1997). During the interview

process, candidates were assessed on their personality attributes and judged on their ability to guide a person with visual impairment. The candidates were then blindfolded and taught an O&M technique. After the candidates learned the technique, they were asked to teach it to the interviewer.

The Korean War in the 1950s required more instructors to be trained. The six O&M specialists from Hines helped with the recruitment and training of 19 more individuals (Bledsoe, 1997). In the decades that followed, the formal techniques once taught only to blinded war veterans would be taught to persons with low vision, children with visual impairments, infants and preschoolers, children with additional disabilities, and eventually older adults (Weiner & Sifferman, 1997). As the population of clients expanded and the need for O&M specialists rapidly grew, the necessity to replicate the Hines training program became apparent; the Hines method of training would later become the backbone of O&M university preparation programs (Bledsoe, 1997).

2.2 HISTORY OF PROFESSIONAL STANDARDS

As the profession began to quickly expand, the concept of training became an issue. In the 1940s and throughout the 1950s, O&M specialists received their training at the hospitals that provided the services. The training was more of an apprenticeship than a structured curriculum. A standardized training program that taught the theoretical and conceptual framework behind O&M was not in place because many people were still skeptical about the need for formal instruction in O&M (Weiner & Siffermann, 1997). At the time, O&M was seen as a trade rather than a profession, so in-depth training was not viewed as necessary. Eventually, in 1953, leaders

in the field of O&M met to discuss the dangers of allowing untrained persons to provide O&M services and the training requirements for O&M specialists (Weiner & Siffermann, 1997). Attendees of the meeting agreed that in order to establish O&M as a profession decisions regarding the criteria for the selection of O&M personnel, course curriculum, and length of preparation needed to be made (Koestler, 1976; Weiner & Sifferman, 1997).

In 1959, the American Foundation for the Blind (AFB) held a national conference to discuss these issues (Koestler, 1976; Uslan et al., 1989; Weiner & Sifferman, 1997). As a result of this conference, requirements regarding the visual abilities of O&M specialists, length of preparation, and a training curriculum were established. Specifically, O&M specialists were required to have normal visual acuity, attend a graduate program for a minimum of one year, and receive training in the "techniques and practice of O&M, dynamics of human behavior as it relates to blindness, functions of the human body, study of the senses, and cultural and psychological implications of blindness" (Weiner & Sifferman, 1997, p. 554).

With the requirement for preparation in a graduate program came the establishment of the first O&M university training program at Boston College in 1960, and therefore, an increased need for the development of clear standards of preparation. In 1961, AFB issued a report called the Commission on Standards and Accreditation of Services for the Blind (COMSTAC) (Koestler, 1966). This report led to the creation of university standards and a formal process for certifying O&M specialists (Weiner & Sifferman, 1997).

Since then, the field of O&M has gone through several versions of certification requirements. The initial certifications standards required only graduation from a university program, membership in a professional organization, and letters of recommendation in order to become certified (Wiener & Siffermann, 2000). In the late 1970s, the Functional Abilities

Checklist (FAC) was used as the standard to certify graduates from O&M university preparation programs (Weiner & Siffermann, 1997). This checklist simply included physical characteristics deemed necessary to teach O&M and focused mainly on O&M specialists' ability to monitor or "see" their clients (Wiener & Siffermann, 1997). Most people at the time believed that O&M specialists needed to have perfect vision in order to monitor the safety of their clients from a distance of up to 375 feet and intervene if a potential danger was eminent (Weiner & Siffermann, 1997). Research by Chilens and LaGrow (1986) indicated, however, that a monitoring distance of 1 foot to 50 feet was the norm when performing the actual job responsibilities of an O&M specialist (as cited in Wiener & Siffermann, 1997). This resulted in a change of the distance monitoring requirements and allowed for O&M specialists with visual impairments to become certified as well if they could demonstrate this competency.

In the 1980s, the Functional Abilities Assessment (FAA) replaced the FCC and included the requirements regarding distance monitoring (Weiner & Siffermann, 1997). These new certification standards attempted to objectively measure the ability of O&M specialists to monitor safety by quantifying the competency in terms of distance. During the university clinical teaching experience, students had to demonstrate the ability to monitor a client's safety at a distance of 6 to 20 feet in order to qualify for certification (Weiner & Siffermann, 1997). These standards, however, still focused only on the O&M specialist's ability to monitor safety not the ability to demonstrate knowledge of the O&M techniques or to actually teach the techniques.

The certification standards were again updated in 1995 to include all the essential job responsibilities of an O&M specialist, not just the ability to monitor safety (Weiner & Sifferman, 1997). The University Orientation and Mobility Competency Form (UOMC) expanded the previous standards to include clinical competencies related to assessment, instructional planning,

instruction, as well as monitoring safety. The form also called for academic competencies, such as demonstration of knowledge of the techniques, to be met in order to receive certification (Weiner & Sifferman, 1997). It was with this form that a standard for training O&M specialists and determining competency was finally created, 50 years after the formation of the profession. The next section of this paper will discuss the research that led to establishing these standards.

2.3 ESTABLISHMENT OF O&M COMPETENCY STANDARDS

Since the onset of O&M certification, the profession has struggled to identify the competencies necessary to be deemed a "qualified" O&M specialist (Weiner & Siffermann, 2000). As a result, O&M competency standards have evolved over the years. In the profession's beginning stages of development, competencies focused more on the instructors' ability to communicate and provide compassion and less on their ability to teach. Following this, the competency standards focused on requirements regarding length of training and the instructors' ability to monitor or "see" their clients from various distances. Later, standards focused less on the instructors' physical and personality attributes and more on their ability to teach specific skills. This evolution of the competency standards was a result of several studies that first identified then examined the necessity of specific academic and clinical competencies (Eichorn and Vigoroso, 1975; Crouse and Kappan 1975; Kimbrough, 1980; Uslan, et al., 1989; Weiner & Siffermann, 2000). Although there is some overlap in these competency areas, academic competencies are essentially the skills O&M students must learn in their university preparation programs and the clinical competencies are the skills they must demonstrate during their internship.

The first studies to examine O&M competencies were conducted by Eichorn and Vigoroso (1975) and Crouse and Kappan (1975). The initial purpose of the study by Eichorn and Vigoroso was to determine if any differences existed in the competencies of undergraduate and graduate trained O&M specialists. The researchers surveyed 188 directors of agencies for the blind. Nearly 40% of the respondents stated they preferred to hire O&M specialists with graduate training because they perceived these individuals to be more competent in demonstrating job responsibilities. Although the researchers did not report any other data regarding the original research question, the results of the study revealed other valuable information. In the open-ended survey responses, the agency directors reported specific professional competencies they preferred O&M employees to possess. The competencies most often reported included training in the following content areas:

1. Skills in O&M
2. Psycho-social development
3. Individualized lessons
4. Teaching ability
5. Perceptual-motor training
6. Knowledge of eye diseases
7. Counseling ability
8. Knowledge of working with those with multiple disabilities
9. Skills in daily living
10. Report writing and record keeping
11. Delivery of inservice training
12. Knowledge of working with elderly (as cited in Kimbrough, 1980, p. 9).

This general list of content areas was valuable to the profession, in particular the training of O&M specialists; however, more specific objectives under each of the content areas were needed. Crouse and Kappan (1975) went beyond this general list of content areas and were the first to identify performance-based objectives for O&M specialists.

In an attempt to develop a prototype program to train dually certified teachers of the visually impaired and O&M specialists, Crouse and Kappan identified specific competencies students needed to demonstrate throughout their training program. This list was generated based on observations, discussions with teachers, and consultations with university faculty in the area of special education. The competency checklist assessed the student's ability to demonstrate knowledge and understanding in the areas of general teaching skills, academic subjects, communication, social and personal adjustment, sensory training, professional development, activities of daily living, and O&M. The performance-based objective statements in the area of O&M included such skills as the ability to teach children with visual impairments to use their remaining senses, travel independently, and employ proper cane techniques. Although the researchers' focus was to simply document the development of a unique preparation program to train dually certified professionals in the field of visual impairment, the identification of performance-based objectives related to teaching O&M was groundbreaking to the profession.

In 1980, Kimbrough expanded upon the list of O&M performance-based objectives and examined their necessity in the training of O&M specialists. Through a review of the limited literature and an analysis of the curriculum of O&M university programs, Kimbrough (1980) identified 130 O&M clinical competency statements (see Appendix A) within the following six categories: (a) preassessment, (b) ongoing instructional planning, (c) instruction and evaluation, (d) communication, (e) interpersonal relations, and (f) administration. Once these competencies

were identified, 313 O&M specialists and 24 O&M university faculty were surveyed to determine how essential each competency was in the training of O&M specialists. The participants rated the 130 clinical competency statements on a 4-point scale: 4 = the competency is absolutely essential for helping students learn O&M; 3 = the competency is relatively important for helping students learn O&M; 2 = the competency is relatively unimportant for helping students learn O&M; and 1 = the competency is absolutely unessential for helping students learn O&M. After calculating the mean scores, the results indicated that 81 competencies were considered absolutely essential, 37 competencies were considered relatively important, and two competencies were considered relatively unimportant.

This extensive list of specific O&M competency skills lead to further research and allowed for the establishment of O&M university program standards. In the 1980s, two studies by Uslan, Hill, & Peck (1989) were conducted to expand upon the work of Kimbrough (1980). Unlike the competencies generated by Kimbrough, which focused on the importance of *clinical* competencies needed during actual O&M instruction, Uslan et al. (1989) examined the importance of *academic* competencies in the preparation of O&M specialists.

The purpose of the first study by Uslan et al. (1989) was to establish a competency-based curriculum for O&M university preparation programs. To do so, a national task force of O&M experts first identified 11 general academic competency areas and 164 specific academic competencies (see Appendix B) within the general areas. The 11 general competency areas selected were:

1. Concept development
2. O&M skills and techniques
3. Assessment

4. Instructional methods and strategies
5. Sensory/motor functioning
6. Psychological aspects
7. Human growth and development
8. Systems of O&M
9. History, philosophy, and profession of O&M
10. Program development, administration, and supervision
11. Professional information (Uslan et al., 1989, p. 33).

These results led to the development of a survey, which was then sent to two groups of participants. Group 1 consisted of O&M specialists, administrators in the field of O&M, and O&M university faculty. Group 2 included adults with visual impairments and parents of children with visual impairments. Both groups were asked to determine what knowledge and skills O&M specialists should possess before entering the profession.

Group 1 was asked to rate the importance of the 164 specific competency areas using a 5-point Likert scale. The rating scale used was: 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree. The results were as anticipated. For Group 1, all competencies were given an average rating of strongly agree or agree. In other words, O&M specialists, administrators, and O&M university faculty felt all of the competency areas were important for pre-service O&M students to possess. The ability to teach O&M techniques and conduct assessments were rated highest by all three subgroups.

Group 2, on the other hand, was asked to evaluate the list of 11 general competency areas. The frequency of responses was calculated and the 11 general competency areas were ranked in order of importance. The results indicated that parents of children with visual

impairments believed the top three competencies were O&M skills and techniques, human growth and development, and instructional methods and strategies. Persons with visual impairments choose O&M skills and techniques, instructional methods and strategies, and sensory/motoring functioning as the top three competencies.

Next, the second study by Uslan et al. (1989) surveyed practicing O&M specialists to determine how often the competencies deemed important in the first study were actually used when teaching O&M techniques to various populations of clients. Since this study focused on the usage of the competencies rather than O&M university preparation requirements, the original 164 specific competencies generated by the national task force were condensed into 37 direct-teaching competencies and 7 indirect-teaching competencies (see Appendix C). To gather information about which competencies were used with various populations for clients, disability categories were created: (a) totally blind, (b) totally blind/additional handicaps, (c) low vision/legally blind, (d) low vision/legally blind/additional handicaps, (e) low vision, (f) low vision/additional handicaps, and (g) not visually impaired. The 393 O&M specialists who responded to the survey classified each person on their current caseload in one of these disability categories and indicated how often they used the 37 direct-teaching competencies and the 7 indirect-teaching competencies with each of those clients.

Comparisons were made between these populations of clients and across competencies. The results revealed five competencies “highly” or “very highly” used with all populations. These competencies were individualized instruction, observational skills, theories of learning, environmental analysis, and assessments. Three competency areas were rated as the least used across all populations, meaning 22% or less of the participants reported using the competencies.

Those competencies were instructing students in wheelchairs, teaching orientation to a dog guide user, and instruction in the use of electronic travel aids.

When comparing the results of both Uslan et al. (1989) studies, the two competencies of *O&M skills and techniques* and *instructional methods and strategies* are at the top of the lists for all participants. From the second study, orientation skills could be categorized under the *O&M skills and techniques* competency area. Individualized instruction, observation skills, theories of learning, and environmental analysis could be categorized under the competency area of *instructional methods and strategies*. These competencies technically fall under both academic and clinical skills. Academically, O&M students need to demonstrate knowledge and understanding of *O&M skills and techniques* and *instructional methods and strategies*. Clinically, O&M students need to demonstrate the ability to apply those skills during O&M instruction. Thus, these two competency areas appear to be a vital component in the training of O&M specialists and the practice of O&M instruction.

These findings are not surprising since the core of O&M is indeed its specialized skills and techniques and the necessity to individualize instruction based on each client's needs. It is surprising, however, that the *measurement* of these two important competencies has not been a focus in the research. Only one study, by Weiner & Siffermann (2000), examined a way to measure the academic competencies, but the measurement of *all* the clinical competencies has not been investigated. This will be discussed in the following section.

2.4 DEVELOPMENT OF A NATIONAL CERTIFICATION EXAM

The academic competencies studied by Uslan et al. (1989) and the clinical competencies studied by Kimbrough (1980) were reexamined again in the 1990s when it was determined that a national examination for certification was necessary to ensure stability in the field and implement standardization in the certification process (Weiner & Siffermann, 2000). During the initial discussions about the concept of a standardized certification exam, questions were raised about the subjectivity of the competencies since qualification for certification was determined at that time by individual O&M university faculty members (Weiner & Siffermann, 2000). If a national certification exam was to be implemented and administered by a separate, unbiased organization, then certification could be judged independently and objectively. To investigate the idea of a national certification exam, an Ad Hoc Committee under the Association for the Education and Rehabilitation of the Blind and Visually Impaired (AER) administered two surveys, a job analysis survey and a validation survey (Weiner & Siffermann, 2000).

The purpose of the job analysis survey was to analyze the importance of 12 competency domains in relation to the job responsibilities of O&M specialists (Weiner & Siffermann, 2000). The domains were similar to the ones investigated by Kimbrough (1980) and Uslan et al (1989). Those competency domains were:

1. Medical aspects of blindness and visual impairments
2. Sensory motor functioning
3. Psychosocial aspects of blindness and visual impairment
4. Human growth and development over the life span
5. Concept development
6. Multiple disabilities

7. Systems of O&M
8. O&M skills and techniques
9. Instructional methods, strategies, and assessment
10. History, philosophy, and the profession of O&M
11. Professional information
12. Development, administration, and supervision of O&M programs (Weiner & Siffermann, 2000, p. 487)

A 5-point Likert scale was used to indicate the importance of each of those competency domains in performing specific job tasks. The job responsibilities listed were:

1. Assessing clients' travel needs, current skills, abilities, and goals
2. Conducting ongoing assessments of O&M skills
3. Assessing environments for travel demands
4. Preparing written reports
5. Developing instructional goals and objectives
6. Establishing rapport with clients
7. Helping clients become aware of body position, movements, and direction
8. Guiding clients to an awareness of the relationships between objects, both fixed and moving, and within spatial systems
9. Teaching techniques that clients need to use to move about safely and independently in the indoor environment
10. Showing clients how to protect their bodies by using basic skills, such as arm and hand protective techniques
11. Teaching techniques that clients need to use to move about safely and independently in the outdoor environment
12. Emphasizing the effective use of visual, auditory, tactile, and other sensory modes
13. Providing instruction and experience in independent travel in the community, including the use of public transportation

14. Making observations and evaluations of clients' progress
15. Maintaining appropriate records
16. Communicating with parents and families
17. Conferring with other members of the professional team (Weiner & Siffermann, 2000, p. 487).

Fifty O&M specialists completed the job analysis survey. The results revealed similar findings to the 1985 survey by Uslan et al (1989). The highest-ranking competency domain was *O&M skills and techniques*. In addition, the six highest-ranking job tasks fell under this domain. These job tasks were related to teaching travel in the indoor environment and through the community, assessing the student, and planning goals and objectives.

The validation survey further examined the 12 competency domains in more detail. The competency statements under each of the competency domains were investigated to determine their relative importance in performing job tasks. This was a lengthier survey compared to the job analysis survey since all the competency statements were listed as opposed to just the competency domains. This was necessary in order to decide which competencies deserved more weight on the national certification exam. Two hundred O&M specialists completed the validation survey. Participants were asked to rate the importance of the competency statements based on a 5-point Likert scale: 1 = not important (not essential), 2 = somewhat important (minimally essential), 3 = important (moderately essential), 4 = very important (essential), and 5 = extremely important (absolutely essential). The results revealed the top ten *academic* competencies used by O&M specialists in completing everyday job tasks were:

1. Modification to O&M skills and techniques
2. Cane techniques and their application
3. Methods of handling the long cane

4. Negotiation of public conveyor systems
5. Human guide techniques
6. Orientation and travel skills including route planning, compass, and intersection analysis
7. Use of long cane as a mobility system
8. Prescription of cane and assistive mobility devices
9. Analysis and selection of environments for teaching O&M skills
10. Observation techniques for O&M instruction (Weiner & Siffermann, 2000, p. 489).

The top ten *clinical* competencies used in completing everyday job tasks were:

1. Developing and maintaining professional relationships
2. Monitoring from a close distance
3. Teaching street crossings proficiently
4. Monitoring from a distance position
5. Teaching environmental concepts proficiently
6. Monitoring from an intermediate distance
7. Establishing rapport and interacting proficiently with consumers
8. Monitoring from a close and an intermediate distance
9. Teaching alignment by sounds and lines of reference proficiently
10. Providing timely, accurate, and effective feedback proficiently (Weiner & Siffermann, 2000, p. 489).

Once again, the majority of these academic and clinical competencies can be categorized under either the domain of *O&M skills and techniques* or *instructional methods and strategies*, similar to the findings in the Uslan et al. (1989) studies in the 1980s. The results of the research by Weiner & Siffermann (2000) were used to create the current competency standards used by the Academy for Certification of Vision Rehabilitation and Education Professionals (ACVREP),

the national organization that certifies O&M specialists. Graduates from approved O&M university preparation programs can receive certification if they demonstrate competencies in 13 academic areas and seven clinical areas (ACVREP, 2001). The academic areas are based on the research by Uslan et al (1989) and the clinical areas are based on the research by Kimbrough (1980). The academic competency areas are:

1. Know professional information
2. Understanding relevant medical information
3. Understand and apply learning theories to O&M
4. Plan and conduct O&M assessment
5. Plan O&M programs
6. Teach O&M related concepts
7. Teach orientation strategies and skills
8. Teach mobility skills
9. Teach use of senses
10. Teach consumers who have additional disabilities
11. Teach diverse consumers
12. Analyze and modify environment
13. Know the psychological implications of blindness and visual impairment

The clinical competency areas are:

1. Communication and professional relationships
2. O&M assessment
3. Instructional planning
4. Instruction
5. Monitoring and safety

6. Facilitating independence
7. Professionalism

To measure these competency areas, two different methods are used. The academic competencies are measured objectively through a standardized national certification exam consisting of 200 multiple choice questions. The questions pertain to the 13 academic competency areas with more weight given to certain areas based on the results of the work by Weiner & Siffermann (2000).

The clinical competencies are measured using a checklist format. At the completion of the O&M internship the clinical supervisor is asked to reflect on the performance of the intern and simply decide if the seven clinical competencies were "met" or "not met" (see Appendix D). The competency statements are vague and do not assess the intern's level of ability within the competency areas. In addition, the decision as to whether the competency was met or not met is based on the clinical supervisor's perception of what the competency means. For example, under the competency area of instruction, interns are judged on their ability "to effectively teach and reinforce the elements of O&M instruction across a range of environments" (ACVREP, 2001, p.11). Not only does this competency statement lump together all environments in which instruction could occur but it fails to define what "effective" teaching looks like. Clinical supervisors may in fact define "effective" teaching differently; therefore, inconsistencies in the evaluation of clinical competencies may exist. The next section will review the literature that has examined the evaluation of *some* of the clinical competencies in O&M.

2.5 EVALUATION OF CLINICAL COMPETENCIES

The lack of research in the area of clinical competencies is often discussed in articles relating to O&M personnel preparation (e.g. Ahearn, 1997; Long, 1990; Huebner & Weiner, 2005; Zebehazy, Zimmerman, & Fox, 2005). Uslan et al. (1989) suggested that research needs to be completed to determine the most appropriate ways to measure competence, especially in the highly important competency areas of *O&M skills and techniques* and *instructional methods and strategies*. A literature review revealed only four studies that attempted to measure some aspect of clinical competency skills – either observation skills or instructor positioning.

The first study to look at the observation skills of O&M specialists was done by Geruschat & De L'Aune (1989). Although this study focused on the observational skills of O&M specialists in order to evaluate O&M clients, as opposed to an evaluation of their own competency skills, it was the first study to focus on the ability of O&M specialists to reliably observe and evaluate mobility performance. Five experienced O&M specialists assisted with the development of a standardized mobility route and the creation of an observation protocol.

For the study, 36 subjects with visual impairments travelled the same route twice, once at the beginning of their O&M training and once at the end. The observation protocol required the O&M specialists to count the number of errors the patients demonstrated in five areas: (a) bumping, (b) stumbling, (c) drop-offs, (d) street crossing, and (e) orientation. A definition of each area was provided along with common examples of each type of problem so there was no ambiguity regarding what constitutes an error. Under the area of orientation, for example, the definition was "a change in direction which was not consistent with the directions provided by the instructor or verbal indication of inability to complete that portion of the route" (Geruschat & De L'Aune, 1989, p. 459). Examples of errors in this area were "unable to find destination",

"unable to remember instructions", and "instructor intervened to reorient subject" (Geruschat & De L'Aune, 1989, p. 459).

Inter-rater reliability evidence was collected to measure the variability of observation protocol responses across evaluators. Intra-class correlation coefficients are commonly used to describe the relationship between different observers who are rating the same quality (Kerlinger & Lee, 2000). In this study, the intra-class correlation coefficient was found to be satisfactory (r =.87).

Validity was demonstrated using two methods. Under the assumption that O&M skills would improve after the completion of O&M training, the first test of validity examined pre-post instruction scores on the observation protocol. A significant increase in scores was found ($p < .05$). The second method required the five O&M specialists to rank order the clients from most improved to least improved. The mean ranking was then correlated with the measured change on the pre-post instruction scores. A correlation of $r = .627$ revealed that there was a high degree of agreement between the *perceived* amount of change in performance and the *measured* amount of change in performance.

In 2005, Zebehazy, Zimmerman, & Fox also examined ways to measure observation skills of O&M specialists. The researchers summed up the importance of this critical competency skill by saying:

> "To serve clients effectively and promote independent travel, O&M instructors need to assess clients' level of abilities and to monitor the clients' acquisition and development of skills. To do so, they must observe at a level that is sophisticated enough to determine the vital needs of their clients for safety and independence and plan individualized instruction accordingly" (p. 646).

To assess observational skills, the researchers created a digital video assessment and compared the observations of certified O&M specialists to those of pre-service O&M students who had completed all the required coursework and had qualified to enter the internship phase of the program. All of the participants viewed video clips of a person traveling with a cane while accompanied by an O&M specialist. The traveler or the O&M specialist purposefully made four to five errors in each of the video clips. Those errors pertained either to the execution of a mobility technique or in the positioning of the instructor relative to the traveler.

After calculating the mean number of errors detected, the results showed that both the O&M specialists and pre-service O&M students found a similar number of errors; however, the number of errors reported by individual participants varied within each group. Of the 14 intended errors, the O&M specialists found an average of 8.9 errors, ranging from 6 to 12. The pre-service O&M students found an average of 9 errors, ranging from 6 to 14. This range of responses raises the question: what is an error? It is possible that what was considered an error by one participant was not necessarily considered an error by another. This prompted the researchers to investigate what constitutes an error and what errors should be recognized by O&M specialists.

Zebehazy, Renshaw, Zimmerman, Fox, & D'Andrea (2008) continued with their previous research and surveyed instructors who taught a specific techniques course at O&M university preparation programs. Participants were asked to select the O&M skills that were most important for pre-service O&M students to be able to recognize when errors in execution were made. They selected a total of 15 techniques, the three most important techniques within five different categories: (a) basic indoor human guide techniques, (b) indoor independent travel, (c) outdoor residential travel, (d) outdoor business travel and (e) instructional practices. The goal of this study was to achieve consensus on the three critical O&M skills in each of the five categories to

be included in a new version of an O&M pre-service student observations skills assessment video.

The results of the study revealed that consensus ranged from 48% to 88%. The lowest consensus percentage was in the category of instructional practices. The three most important skills selected in this area were intervening, positioning at street crossings, and using probing questions. These skills fall within the *instructional strategies and methods* competency area, which was previously identified as one of the most important competency areas (Eichorn & Vigoroso, 1975; Crouse & Kappan, 1975; Kimbrough, 1980; Uslan, Hill, & Peck, 1989; Weiner & Siffermann, 2000). However, results from this study revealed that professionals in the field seemed to disagree more in this area as it relates to the most important areas for identifying errors. Notably, the researchers admitted that the low consensus in the area of instructional practice might have been due to the perception that all the skills were important, rather than just one. However, lack of consensus may also imply that there is no standardized view on the specific competency skills needed in the area of *instructional strategies and methods*. This lack of clarity relates back to the issue of possible inconsistent judgments by clinical internship supervisors regarding competency and the vagueness of ACVREP's clinical competency form. If professionals in the field view the importance of identifying errors differently, then decisions regarding clinical competency could be inconsistent as well. This low rate of consensus pertaining to positioning of O&M specialists at street crossings prompted a third study by the same researchers.

Renshaw, Zimmerman, & Zebehazy (2009) surveyed O&M specialists and pre-service O&M students to investigate where they position themselves when monitoring clients who are practicing street crossings. Diagrams of intersections and a scenerio of a particular client were

presented. Participants were asked to select the best instructor position out of four graphical choices. Calculating the most frequently selected choices for each diagram once again revealed disagreement among the professionals. In general, the majority of participants were divided between two of the four position options. This is a concern because proper positioning is an important skill for O&M specialists to have in order to ensure the safety of clients. These results provide further evidence that no standards exist for demonstrating competency in this critical area of instruction.

Overall the studies just discussed reveal a need for an evalution tool that would allow the field of O&M to establish a standard and accepted approach to evaluating the clinical competencies of O&M speicalists. The following section discusses how evaluation tools are developed and examined for evidence of validity and reliability.

2.6 DEVELOPMENT OF EVALUATION TOOLS

The process of designing an evaluation tool and choosing the measurement scale begins by addressing the following questions:

1. What type of instrument is appropriate for the intended purpose?
2. What sources of information will serve as the basis in the development of the instrument?
3. What items should it contain and how should those items be stated and formatted?
4. Who will use the evaluation instrument and are directions needed to administer and score it?
5. What is the appropriate rating scale and criterion?
6. What evidence will be used to determine that the instrument actually measures what it is intended to measure and consistently measures the construct under investigation? (Aiken, 1996)

Once these questions have been considered, construction of the tool begins by choosing a checklist or rating scale format.

2.6.1 Checklists and Rating Scales

The choice of a checklist or rating scale format depends on the purpose of the evaluation tool (Aiken, 1996). Checklists consist of a list of statements concerning characteristics or behaviors. The rater indicates if the statement was “met or not met” or if a behavior “exists or does not exist”. The current ACVREP clinical competency form uses this format; however, a checklist is appropriate only when evaluating “either-or” situations not behaviors that exist on a continuum. When the developer of the tool wants to evaluate behaviors that exist on a continuum rating scales are more appropriate (Aiken, 1996).

Rating scales can generally be categorized as either unipolar or bipolar (Aiken, 1996). A unipolar scale uses a single term or phrase related to a behavior or trait, with the rater indicating “the extent to which the ratee possesses that behavior or trait” (Aiken, 1996, p. 34). A bipolar scale uses two opposing adjectives . . . to define the ends of the rating scale. Unipolar scales should contain 4-5 rating categories and bipolar scales should contain 5-7 categories (Aiken, 1996). Numerical, graphic, and behaviorally anchored scales are some examples of rating scales that can be classified as unipolar or bipolar, depending on the attribute or characteristic being measured (Aiken, 1996).

Numerical rating scales (see Figure 1) require the rater to assign a number to the characteristic being measured, while graphic scales (see Figure 2) elicit performance ratings in terms of amount or frequency by requiring the rater to indicate performance level on a verbally anchored scale (Aiken, 1996). On the other hand, behaviorally anchored scales define performance in terms of explicit behaviors (Aiken, 1996). These behavioral scales have a variety

of formats. The traditional behaviorally anchored rating scale (BARS) was the first of its kind (McGreal, 1990). This format provides descriptive behaviors within a framework from which the rater can rate performance related to the content category (see Figure 3). It is therefore less subjective than numerical and graphic rating scales (Aiken, 1996). McGreal (1990) explains that "the important features of this rating process are that (1) the rater is essentially forced to think of behavioral performance specimens related to an employee's effectiveness (rather than impressions or vague remembrance of his or her performance, and (2) the behavioral anchors provide definite benchmarks against which to compare ratee performance (p. 45).

However, criticism of the BARS has focused on the difficulty in rating an individual on very specific behaviors (McGreal, 1990). In response to this criticism, the behavior summary scale (BSS) was developed (see Table 1). This format anchors performance with more general benchmarks rather than specific behaviors. The general statements are developed from highly specific incidents representing levels of performance.

In addition to the BSS, the third type of behavioral scale is the behavioral observation scale (BOS). In this format, overall behavioral statements are given and the rater scores the individual on a 5-point scale representing frequency of performance (see Figure 4). Although a behavior statement is provided, the performance rating is still quite subjective (McGreal, 1990).

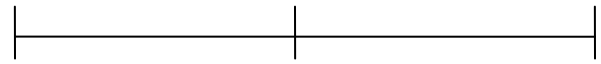
In summary, considerable research has focused on rating scale choice, the optimal number of points to use in rating scales and the development of scale values (Aiken, 1996; McGreal, 1990; Friedman & Leefer, 1981). The research to support rating scales is actually unimpressive (Aiken, 1996). Numerical and graphic formats are the most popular, but scoring is more subjective (Aiken, 1996). Behavioral rating scales are recommended if a rating scale is to

be used (Borman, 1986; Jacobs, 1986; Manatt & Peterson, 1988; McGreal, 1990), as they allow for more control over errors in rating and less subjectivity in judgment (Aiken, 1996).

Student is well organized	1	2	3	4	5
Student is prepared for lessons	1	2	3	4	5
Student shows enthusiasm	1	2	3	4	5
1= never, 2 = seldom, 3= sometimes, 4 = often, 5 = always					

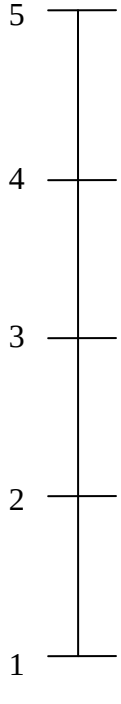
Figure 1: Example of a Numerical Rating Scale

1. Communication
2. Instructional Planning
3. Instruction



Exceeds Standards | Meets Standards | Does Not Meet Standard

Figure 2: Example of a Graphic Rating Scale



Extremely good performance — 5 — Intern recognizes a potentially dangerous situation at least 10 feet before it is encountered.

Good performance — 4

Neither good nor bad performance — 3 — Intern recognizes a potentially dangerous situation at least one foot before it is encountered.

Poor performance — 2

Extremely poor performance — 1 — Intern does not recognize a potentially dangerous situation until after it is encountered.

Figure 3: Example of a Behaviorally Anchored Rating Scale

Table 1: Example of a Behavioral Summary Scale

Levels of Performance	Knowledge of Content
Unsatisfactory	Teacher makes content errors or does not correct content errors students make.
Basic	Teacher displays basic content knowledge but cannot articulate connections with other parts of the discipline or with other disciplines.
Proficient	Teacher displays solid content knowledge and makes connection between the content and other parts of the discipline and other disciplines.
Distinguished	Teacher displays extensive content knowledge, with evidence of continuing pursuit of such knowledge.

Student is able to effectively monitor O&M skills by accurately gauging acquisition of skills and determining if the client has mastered the skill.						
Almost Never	1	2	3	4	5	Almost Always

Figure 4: Example of a Behavioral Observation Scale

2.6.2 Determining the Content

After the appropriate rating scale format has been selected, the developer must determine the content to be included on the tool. Aiken (1996) discussed two strategies for constructing the content of evaluation tools. The deductive approach uses theoretical conceptions related to the content area to create the evaluation tool (Aiken, 1996). These conceptions are based on personal experience, expert opinion, research and professional standards. Later, an inductive approach is employed. This strategy uses data, such as validity and reliability evidence, to fine tune the evaluation tool (Aiken, 1996).

For example, using a deductive approach and a BSS format, Danielson (1996) created a framework for effective teaching based on empirical studies and theoretical research related to the principles of effective practice and classroom organization. In this framework, the complex

task of teaching was divided into four domains. Those domains were further broken down into 22 competency skills. For example, Domain 1 focused on instructional planning and preparation. The components under this domain were related to demonstrating knowledge of content and pedagogy, demonstrating knowledge of students, selecting instructional goals, demonstrating knowledge of resources, designing coherent instruction, and assessing student learning. However, rather than listing a general behavior such as "teacher demonstrates knowledge of content," Danielson identified four levels of performance – unsatisfactory, basic, proficient, and distinguished.

An *unsatisfactory* rating is given if the teacher "does not yet appear to understand the concepts underlying the component" (Danielson, 1996, p.36). A *basic* rating is given if the teacher "appears to understand the concepts underlying the components and attempts to implement its elements" (p. 36). A *proficient* rating is given if the teacher "clearly understands the concepts underlying the component and implements it well" (p. 37). A *distinguished* rating is given if the teacher achieves mastery of these skills and "makes a contribution to the field, both in and outside their school" (p. 37). The components purposefully did not identify specific actions that teachers should take, but rather provided a structure for those actions within the performance levels. Danielson believed that:

> "The components are grounded in the assumption that even though good teachers may accomplish many of the same things, they do not achieve them in the same way. Therefore, a list of specific behaviors is not appropriate. Rather, what is needed is a set of commonalities underlying the actions, with the recognition that specific actions will and should vary, depending on the context and the individual." (p. 17)

Although Danielson (1996) did not investigate the validity and reliability of the framework, the deductive approach used in the study served as a basis for determining the performance levels on the new O&M evaluation tool created for the current study. The next two sections discuss validity and reliability and methods for investigating this evidence to fine-tune the evaluation tool.

2.7 VALIDITY AND RELIABILITY

2.7.1 Validity

In its most simple terms, validity is defined as "the degree to which a test measures what it is suppose to measure, and, consequently, permits appropriate interpretation of scores" (Gay, 1992, p. 138). Establishing validity ensures that a tool "is valid for a particular purpose and for a particular group" (Gay, 1992, p. 138). Previously, there were several different types of validity: content, construct, and criterion-related (Aiken, 1996). Currently, validity is considered in holistic terms. Rather than examining each type of validity individually, multiple categories of evidence are considered to determine if an assessment tool is valid (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999; Nitko, 2004). Content, internal structure, external structure, and practicality are some of the categories of validity evidence that should be collected in order to support an argument that a tool is valid (Nitko, 2004).

Content evidence allows the researcher to determine the extent to which a group of experts in a particular content area agree that an instrument measures what it is designed to measure (Aiken, 1996). The experts are asked to examine the items on the instrument to determine if any items are missing, if the items present are representative of the construct being

measured, and if any unintended constructs are being measured. This can be done through the use of a survey that asks the experts questions related to the clarity of the items, the relevance of the item to the profession and/or professional standards, and representativeness and importance of the item to the content area (Nitko, 2004; Stickley, 2004; Fitzgerald, Delitto, & Irrgang, 2007). The survey responses are analyzed to calculate the frequency distributions and determine the percentage of agreement between the experts (Gay, 1992; Kerlinger & Lee, 2000; Nitko, 2004). To calculate the level of agreement, the responses are dichotomized to evaluate the extent of agreement. For example, when using a 4-point Likert scale, the two lower response categories are grouped and the two higher response categories are grouped (Polit & Beck, 2006). The number of participants that agree with the statement is then divided by the total number of participants then multiplied by 100 to determine the percentage of agreement. An 80% level of agreement is desired when examining the content evidence of a new assessment tool (Martuza, 1977; Lynn, 1986; Davis, 1992; Grant & Davis, 1997; Rubio, Berg-Weger, Tebb, Lee, & Rauch, 2003; Polit & Beck, 2006).

Internal structure evidence describes the interrelationships among the test items, and the relationship between those items and the total test score (Nitko, 2004). A test may be designed to measure a single behavior or multiple dimensions that are homogeneous yet distinct (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). In order to determine if a test is measuring a single behavior or multiple dimensions, the relationship among the items to the conceptual framework needs to be assessed. For example, a tool that measures the clinical competencies of O&M interns would ultimately be assessing that one behavior, clinical competency, but may contain multiple dimensions that ideally contribute to that one behavior. Those dimensions include:

communication, O&M assessment, instructional planning, instruction, monitoring and safety, facilitating independence, and professionalism. Evidence should demonstrate that although the O&M intern's scores across dimensions are moderately related, they are different enough to be interpreted as distinct aspects of clinical competency. Correlation coefficients are used to quantify the degree of this relationship between dimensions (Nitko, 1999). In some cases factor analysis can also be used when examining a large number of item level relationships (Stone, 2008). A factor analysis can provide evidence that items within dimensions are more homogeneous, or more related to one another, than items across dimensions (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2004). This evidence would be desirable when a test is hypothesized to contain multiple dimensions or components.

External structure evidence focuses on the pattern of relationship between test scores that are reported and external variables (Nitko, 2004). It can include an analysis of the relationship between the scores from the test and scores from another test measuring the same construct (American Educational Research Association et al, 1999). For example, when attempting to validate a new assessment tool measuring the clinical competency of O&M interns, evidence of the relationship between test scores on the new tool and test scores on the ACVREP clinical competency evaluation form would be appropriate. If both measure the same ability, clinical competency, one would expect the scores to be positively correlated. Again, this evidence uses correlation coefficients to quantify the degree of the relationship (Nitko, 2004).

The last category of validity evidence to be considered for the purposes of this study is practicality evidence. If there are issues related to efficiency, practicality, and usefulness of an assessment tool, the valid use of the tool may be hindered (Nitko, 2004). This evidence is gathered by asking for feedback on the tool related to these areas.

2.7.2 Reliability

Reliability refers to the consistency of scores either across occasions, content samples, or raters (Nitko, 2004). The purpose of these analyses is to examine different possible sources of error in measuring the construct of interest (American Educational Research Association et al, 1999). For the purpose of this paper, internal consistency and inter-rater reliability will be discussed.

Internal consistency reliability examines the homogeneity of the item responses and the relationship of the test items with the total test score (Nitko, 2004). Unlike internal structure evidence of validity, which looks at the relationship between dimensions (for example, communication, instructional planning, instruction, etc), internal consistency reliability focuses on the item-to-item consistency within a test. The formula used to calculate internal consistency varies depending on the data being analyzed (Gay, 1992). In the case where item responses are worth different values, such as in rating scales, Cronbach's coefficient alpha is used (Groves et al, 2004) and item and item-total statistics are obtained to reveal if any flawed items are present (Stone, 2008). The reliability coefficient "reflects the degree to which scores are free of measurement error" (Nitko, 2004, p. 181).

Inter-rater reliability refers to the consistency of two (or more) independent raters (Gay, 1992). Inter-rater reliability is important to measure when the scoring of an instrument is subjective, such as with rating scales and observation instruments (Gay, 1992). Estimates of inter-rater reliability are expressed as percentages of agreement or as correlation coefficients (Nitko, 2004). The choice of which statistical index to use depends on whether students' actual scores or relative scores are important for interpretation (Nitko, 2004). When students' actual scores are important in order to interpret if they passed or failed, then percentages of agreement

should be used. When students' relative scores (rank order) are important for interpretation, then correlation coefficients should be used.

2.8 INVESTIGATING VALIDITY AND RELIABILITY

When creating an evaluation tool, it is important to collect the validity and reliability evidence discussed in the previous section in order to assure that there is support for the specific interpretations of scores and consistency in measurement of those scores. This type of research has not been done in the field of O&M; however, similar disciplines, such as physical therapy, have examined this issue (e.g. Kern & Mickelson, 1971; Stickley, 2005; Fitzgerald, et al., 2007; Brosky & Scott, 2007).

The standards of practice in the area of physical therapy are stipulated by the American Physical Therapy Association (Roach, Gandy, Deusinger, Clark, Gramet, Gresham, et al, 2002). Much like the ACVREP clinical competencies evaluation form, the physical therapy standards are vague. This prompted some researchers in the field of physical therapy to create clinical internship evaluation tools.

Today, in the field of physical therapy, there are two clinical evaluation tools most commonly used (Stickley, 2005). The Physical Therapist Manual for the Assessment of Clinical Skills (PT MACS), created by the Texas Consortium for Physical Therapy Clinical Education, is one of those instruments (Patel, Dillon, & Nagel, 2004). In 2005, Stickley was the first to report the content evidence of the PT MACS. In the study, content evidence was collected by comparing items on the PT MACS to criteria considered to be the foundation of physical therapy. The criteria used were *A Normative Model of Physical Therapist Professional*

Education (American Physical Therapy Association, 2000) and *The Guide to Physical Therapist Practice* (2001). *A Normative Model* outlines the practice expectations, educational outcomes, and content for curriculum for physical therapists and *The Guide* provides an in-depth description of physical therapy practice (Roach et al., 2002).

To gather content evidence, the researcher asked six subject matter experts in the field of physical therapy to match the skills present in the PT MACS with the statements found in the two criteria documents. If three or more of the experts matched a specific skill on the PT MACS to a criterion from one of the other documents, then that skill was included in the construction of a questionnaire. The questionnaire asked participants to indicate their agreement on the matching of the skills on the PT MACS with the criteria from *A Normative Model* and/or *The Guide*. A 4-point scale was used: 4 = strongly agree, 3 = agree, 2 = disagree, and 1 = strongly disagree. This 4-point scale was used to ensure a directional decision rather than a neutral response. Twenty-eight physical therapists completed the questionnaire.

To analyze the results of the study, descriptive statistics were used to summarize subject demographic information. The responses on the questionnaires were then analyzed using the chi-squared goodness-of-fit test to determine the level of agreement among the experts. In statistical analysis, this test is used to examine if there is a significant difference between the observed value and the expected value on the rating-scale responses (Shavelson, 1996). For this study, the data were divided based on the categories of the PT MACS: (a) professional practice, (b) tests and measures, (c) plan of care, (d) interventions, (e) practice management, (f) site-specific intervention, and (g) site-specific practice management. The number of chi-squared tests for each category varied depending on the number of skills included in each category. The agreement among the subjects was statistically significant on 50 of the 53 skills on the PT MACS,

indicating that the evaluation tool had good content validity evidence. Overall, the researcher found the PT MACS to be representative of the skills needed by physical therapy students in their clinical internship to demonstrate competency.

Besides the PT MACS, the other most commonly used clinical evaluation tool in physical therapy is the Clinical Performance Instrument (CPI), developed by the American Physical Therapy Association (Stickley, 2005). In 2002, a research report by the American Physical Therapy Association's Task Force for the Development of Student Clinical Performance Instruments outlined the creation of the CPI and reported content and construct validity evidence, internal consistency reliability, and inter-rater reliability (Roach et al., 2002).

To begin the research, a 10-person task force used *The Normative Model* and *The Guide* to create 23 performance competencies and provide observable behaviors for each performance criterion. Once the tool was created, the researchers collected validity evidence. Fifty experts were asked to review the tool and provide feedback on the structure of the tool, clarity in the directions for using the tool, relevance of the competencies to the practice of physical therapy, and criteria for identifying poor student performance on any of the competencies. Based on feedback from the 50 experts, the researchers clarified the directions in order to eliminate ambiguity in using the tool and added two additional items to assess the student's overall performance relative to academic and clinical expectations and overall performance relative to an entry-level clinician.

The second draft of the CPI, along with a survey to collect content validity evidence, was sent to potential users of the tool (Roach et al., 2002). A total of 1,050 people completed the survey and provided feedback. The results indicated that more changes needed to be made,

specifically in terms of clarifying some of the performance competencies and user instructions, and expanding the list of sample performance behaviors.

In addition, the task force piloted the tool in order to collect internal consistency reliability and internal structure validity evidence. The sample consisted of 282 physical therapy students from 31 professional education programs in the U.S. All of the subjects were in various stages of their clinical internships. The clinical supervisors of the students were asked to complete the CPI and scores were used to examine validity and reliability.

To begin, the researchers investigated whether all the items included in the instrument measured different features of a single behavior, clinical competence. Cronbach's coefficient alpha was calculated to determine the extent to which item responses correlated with each other and with a total test score. An alpha of .97 indicated a high level of internal consistency.

Next, the task force hypothesized that clinical performance should be related to the amount of clinical experience. To gather this internal structure evidence, they calculated Pearson correlation coefficients to determine the relationship between the item scores and total days of clinical experience in order to test their hypothesis. The Pearson correlations for several items were reported to be .49. Unfortunately, further detail was not provided.

Finally, to collect evidence related to inter-rater reliability, the researchers used a subset of the subjects in the pilot study. Seventy clinical supervisors were paired. Those pairs were asked to evaluate the same student and measure the variability of responses across evaluators. Intra-class correlation coefficients (ICCs) were calculated and ranged from -.02 to .62, indicating in some cases there was no consistency in ratings.

Based on these results, the task force created a third draft of the CPI and replicated the study, once again examining internal consistency reliability, internal structure validity evidence,

and inter-rater reliability (Roach et al., 2002). The results showed internal consistency reliability essentially stayed the same ($\alpha = .96$), internal structure validity evidence dropped (ranging from $r = .12$ to $r = .37$), and inter-rater reliability estimates improved (ranging from $r = .21$ to $r = .76$). The task force reported that these results were likely due to the lack of clarity in the directions on the use of the tool and ambiguity in the wording and terminology used. In an attempt to correct these flaws, the task force revised the CPI and created a fourth version. Unfortunately that version was not examined for validity and reliability evidence; however, it is one of the tools currently used to evaluate the clinical competencies of physical therapy interns.

The two studies just discussed (Roach et al., 2002; Stickley, 2005) provide insight into the process of gathering validity and reliability evidence related to clinical assessment tools. Although it is a drawn out process and requires multiple revisions and examinations of the evidence, the creation of a similar tool is desperately needed for the field of O&M in order to assess clinical competencies during the O&M internships.

2.9 SIGNIFICANCE OF THE PROBLEM

Despite its existence for nearly 60 years, the profession of O&M has conducted little research on the methods for evaluating *clinical* competencies. This issue is often mentioned in the literature relating to O&M preparation (e.g. Ahearn, 1997; Long, 1990; Huebner & Wiener, 2005; Zebehazy, Zimmerman, & Fox, 2005), but is frequently overlooked. The research that has been done has focused primarily on identifying academic and clinical competencies and determining how essential those competencies are in the training of O&M specialists. Although these studies were vital in the establishment of the competencies, little research has attempted to examine the

criteria for *assessing* those competencies. In fact, no research has determined a valid and reliable means to evaluating the clinical competencies of O&M specialists and the various ability levels within those competencies.

To understand the significance of this deficient research and the importance of evaluating competencies, one must look to the definitions of these terms. The term *competence* is defined as "the state or quality of being adequately or well qualified; ability; a specific range of skill, knowledge, or ability" (American Heritage Dictionary of the English Language, 2000). To ensure that O&M specialists are equipped to handle the current demands of their jobs, are knowledgeable, properly trained, and competent instructors, a tool for evaluation of clinical competencies is vital. Without clear standards for the demonstration of these important competencies, a client's safety could be at risk.

Evaluation is defined as "the process of determining the extent to which educational objectives are achieved" (Kern & Mickelson, 1971, p. 540). Evaluation of clinical competence "can only be assessed by the observation of associated behaviors. Any instrument assessing competent clinical practice must include a balanced and representative sample of behaviors considered to be indicative of the profession as a whole" (Stickley, 2005, p. 24, citing Cross, V., Hicks, C., Barwell, F., 2001). "A clinical performance evaluation tool should have standardized tasks and instructions, pre-established identification of the critical aspects of the performance and the acceptable range of responses, and a standardized manner of scoring" (Stickley, 2005, p. 24, citing Ladyshewsky, R., Baker, R., Jones, M., & Nelson, L., 2000).

The current tool used in the field of O&M does not follow these standards. The ACVREP clinical competency evaluation form uses a checklist format and asks clinical internship supervisors to simply decide if the seven clinical competencies were "met" or "not met". Critical

aspects of performance are not identified and an acceptable range of responses is not provided. The clinical competency statements are vague and do not assess the intern's level of ability within the competency areas, nor do they identify specific skills within those competencies. In addition, the decision as to whether the competency was met or not met is based on the clinical supervisor's perception of what the vague competency statement means. For example, under the competency area of instruction, the interns are judged on their ability "to effectively teach and reinforce the elements of O&M instruction across a range of environments" (ACVREP, 2001, p.11). Not only does this competency statement lump together all environments in which instruction could occur but it fails to define what "effective" teaching looks like. Clinical supervisors may in fact define "effective" teaching differently, therefore, inconsistencies in the evaluation of clinical competencies may exist.

Because of the subjectivity and vagueness of the ACVREP form, the field of O&M needs a new assessment tool that is less subjective and better defines effective teaching and performance. In addition, the new evaluation tool must be examined for reliability and validity evidence in order to assure consistency in scores and allow for appropriate interpretation of those scores.

2.10 RELEVANCE OF THE STUDY

The goal of this study was to create an evaluation tool that would be the new standard for evaluating clinical competencies of O&M interns in the field of O&M. The researcher envisioned that this new evaluation tool could be used for three purposes. ACVREP could use the tool to determine if O&M interns are qualified to receive national certification. In addition,

all O&M university programs could use this tool as a means for determining curriculum decisions. If students appear to be deficient in particular competency skills, O&M university faculty could provide further instruction and focus on those skills at the academic level. And finally, clinical internship supervisors could use the tool to evaluate O&M interns on numerous occasions throughout the internship to determine where remediation is needed. Multiple evaluations and structured feedback could allow O&M interns to achieve the highest level of competency by the completion of the internship.

3.0 METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the creation of the O&M Clinical Competency Evaluation Matrix (CCEM) and the procedures used to examine validity and reliability evidence. The study consisted of three phases that utilized both qualitative and quantitative research approaches. In Phase 1, the researcher analyzed the current literature to develop a general framework for the new O&M Clinical Competency Evaluation Matrix (CCEM) and its contents. Phase 2 consisted of surveying O&M university faculty to gather feedback on the content of the evaluation tool and making revisions based on that feedback. Phase 3 consisted of piloting the evaluation tool with O&M clinical internship supervisors whose O&M interns completed their internships between July 15, 2009 and March 1, 2010. To achieve the goal of the study, the researcher examined content, internal structure, external structure, and practicality validity evidence as well as internal consistency and inter-rater reliability evidence.

3.2 RESEARCH QUESTIONS

This study explored the following research questions:

Q1: Are the competency skills on the O&M CCEM representative of the content area it is designed to measure? Are any competencies skills missing?

Q2: Are competency skills within the seven clinical competency domains highly related to other competency skills within the same domain?

Q3: Is there a relationship between scores on the O&M CCEM and the ACVREP clinical competency evaluation form?

Q4: Is there consistency in the rating for each item and total test score? Do all items measure various aspects of clinical competency?

Q5: Is there consistency in the rating between raters?

Q6: Is the O&M CCEM a practical tool to use to evaluate the clinical competencies of O&M interns?

3.3 CREATION OF THE O&M CCEM

In the first phase of the study, the researcher created the O&M CCEM. This process involved determining the competency domains, competency skills within the domains, rating scale, and performance levels for the new evaluation tool. Based on the prior O&M research related to competencies (Eichorn and Vigoroso, 1975; Crouse and Kappan 1975; Kimbrough, 1980; Uslan, et al., 1989; Weiner & Siffermann, 2000), the tool focused on the seven clinical competency domains outlined by ACVREP: communication and professional relationships, instructional planning, instruction, monitoring and safety, facilitating independence, and professionalism (AVREP, 2001). The researcher determined that this structure was appropriate because these were the competency domains accepted by the field and the purpose of this study was not to change the current competency domains but rather to expand upon and clarify them.

Under each of the seven clinical competency domains, specific competency skills were established. The individual competency skills were selected using the previous research that investigated clinical competencies in the area of O&M. Most of the skills were based on the competency statements by Kimbrough (1980), the direct and indirect competencies by Uslan et al., (1989), and the job responsibilities identified by Weiner & Siffermann (2000). The competency skills under the monitoring and safety domain were based on the studies pertaining to observation skills and instructor positioning (Zebehazy, et al., 2005; Zebehazy, et al., 2008; Renshaw, et al., 2009). Appendix E shows how the competency statements from the previous O&M research were used to establish the competency skills on the O&M CCEM. The result was 40 competency skills under the seven domains.

Next, the researcher selected the rating scale format. A behavior summary scale (BSS) was chosen because this type of rating scale is appropriate when "the behavior to be rated exists on a continuum and variation in the quality of performance [is] to be expected" (Kern & Mickelson, 1971, p. 542). Behaviorally anchored formats allow for more control over errors in rating and less subjectivity in judgment (Aiken, 1996) and are recommended if a rating scale is to be used (Borman, 1986; Jacobs, 1986; Manatt & Peterson, 1988; McGreal, 1990).

The most challenging task in constructing the O&M CCEM was selecting the criteria for the performance levels. These levels were based on the competency statements from the previous O&M research, the theoretical research by Danielson (1996), and the professional experiences of the researcher and two of the doctoral committee members, Dr. George Zimmerman and Dr. Kim Zebehazy, all of whom are Certified O&M Specialists (COMS). Using the behavioral summary scale format, four levels of performance were constructed for each competency skill.

The conceptual framework used in establishing the performance levels was: Level 1 = the O&M intern does not appear to understand the concepts underlying the competency skill; Level 2 = the O&M intern appears to understand the concepts underlying the competency skill and attempts to implement its elements; Level 3 = the O&M intern clearly understands the concepts underlying the competency skill and implements it well; and Level 4 = the O&M intern achieves mastery of the competency skill. Within each competency skill the wording was tailored to provide a range of performance levels specific to that competency skill.

3.4 PARTICIPANTS AND DATA COLLECTION

The next two subsections discuss Phase 2 and Phase 3 of the study. Phase 2 consisted of surveying O&M university faculty and Phase 3 consisted of piloting the evaluation tool with O&M clinical internship supervisors.

3.4.1 O&M University Faculty

The researcher sent personal emails to O&M university faculty members at the 19 O&M university preparation programs located in the United States, Canada, and New Zealand (see Appendix F). The email explained that the survey should only be completed by O&M university program coordinators or any other full or part-time O&M faculty hired by the university to supervise O&M students during their internships.

A total of 12 O&M university faculty members responded to the email. They represented O&M University programs in all regions of the United States (Northeast, Southeast, Midwest, Southwest, and West). In addition, one faculty member from each of the O&M universities in New Zealand and Canada participated. All had more than 11 years of experience in the field of

O&M, with 75% of the participants having more than 20 years experience. In addition, all participants had supervised more than 10 O&M interns. These individuals were considered "experts" for the purpose of collecting content evidence.

Participants completed an online survey to gather feedback on the O&M CCEM and collect validity evidence. Due to the length of the survey, the researcher randomly assigned the 12 participants to answer questions on only half of the competency skills. Six participants answered questions regarding competency skills 1 though17 under Domains 1 through 3 and six answered questions regarding competency skills 18 through 40 under Domains 4 through 7. It was divided in this fashion because the researcher did not want to split the domains areas.

The survey (see Appendix G) consisted of a demographics section and an item review of the competency skills. The item review questions pertained to the relevance of the competency skill to the profession, representativeness of the competency skill to the content area, essentiality of the skill in practicing O&M, appropriateness of the performance levels, and perceived competency needed at the completion of the internship based on the four performance levels.

Besides the item review questions, participants answered open-ended questions related to the competency skills and performance levels. These responses were considered for revision purposes and to determine if any competency skills were missing. These revisions will be discussed further in chapter 4. The result was 46 competency skills instead of 40. A comparison of the competency skills on the initial draft and final version of the O&M CCEM can be found in Appendix H.

3.4.2 O&M Clinical Internship Supervisors

After revisions on the O&M CCEM were made, the researcher emailed O&M university faculty and asked for a list of their current or recent O&M clinical internship supervisors (see Appendix

I). After only three university faculty members responded, a second email was sent. This time, the email provided an explanation of the study that could be forwarded directly to their clinical supervisors (see Appendix J). Interested clinical internship supervisors contacted the researcher and a screening was completed to determine if they were qualified to participate. The screening included seven questions:

1. Have you served as an O&M clinical internship supervisor for an O&M intern who completed or will complete his/her O&M internship with you between July 15, 2009 and March 1, 2010? (If yes, the interview was continued. If no, the screening was discontinued.)
2. How many interns have you supervised or will you supervise between those dates?
3. Has the O&M intern(s) completed his/her internship already?
4. What was/is the date that the internship was/will be completed? (If the date was prior to the phone screen, the interview was continued. If not, the interested participant was informed that they will be contacted once the internship was completed.)
5. Were you the one responsible for completing the ACVREP clinical competency form?
6. Have you completed the ACVREP clinical competency evaluation form already?
7. Were you the only person to serve as the O&M intern's clinical supervisor?

To qualify, individuals had to answer "yes" to question one. If they did, question two was asked to determine the number of times the survey would need to be completed. If they supervised more than one O&M intern, they were asked to complete the survey focusing on only one intern at a time and complete it multiple times, once for each O&M intern. Questions three, four, five, and six were asked to determine if the individual was qualified to take the survey at

the time of the screening. Since the researcher did not want to influence the clinical supervisors' responses on the ACVREP clinical competency form, it was important to assure that the internship was already completed and the ACVREP competency form was already submitted for certification purposes. Question seven was asked to determine if inter-rater reliability evidence could be collected. If more than one person was responsible for supervising an O&M intern then both were invited to individually take the survey.

In total, the researcher completed 19 phone screens. Of those, 16 clinical internship supervisors, all from the United States, qualified to participate and three did not because their O&M intern would not complete the internship by March 1, 2010. Of the 16 supervisors that qualified, four had supervised multiple O&M interns during the timeframe so they completed the survey multiple times. In the end, the survey was completed a total of 29 times.

The survey itself consisted of five sections. The first section included demographic questions pertaining to the clinical supervisors. To determine if the participants were a representative sample of clinical internship supervisors across all regions of the country (Northeast, Southeast, Midwest, Southwest, and West), the survey asked the participants in what region did they receive their own O&M training and in what region were they currently employed. Combined the 16 supervisors represented all regions for both questions.

In terms of experience, 12 of the participants indicated they had worked as an O&M specialist for more than 11 years, three participants worked between six and ten years, and only one worked less than five years. In addition, all of the participants had previous experience supervising O&M interns.

The first section also asked the participants to create a password. This was necessary to allow the researcher to match responses in cases where two clinical internship supervisors

completed the survey on the same intern. In those circumstances, the supervisors who completed the survey first were asked to share their passwords with the corresponding supervisor. During data analysis, this allowed the researcher to match the responses in order to collect inter-rater reliability evidence. This comparison identified six pairs of raters, meaning six interns were evaluated by two supervisors.

The second section of the survey asked demographic questions about the O&M interns and their internship experiences. Because six of the 29 surveys contained duplicate information for some of the interns, this demographics information was analyzed only for the 23 individual O&M interns. The O&M interns represented seven O&M universities. Eighteen of the interns completed their O&M internships at an adult rehabilitation agency or Veteran's Administration hospital and five completed their internships in a public school or specialized school for the blind.

The third section asked the clinical supervisor to evaluate the O&M intern using the current ACVREP clinical competency evaluation form. They were instructed to select the same answers as they did when completing the actual ACVREP clinical competency form and encouraged to have a copy of that form available to assure consistency in their responses. The fourth section was the new O&M CCEM and the fifth section asked for the participant's overall feedback on the new tool and the competency skills. A copy of the entire survey is in Appendix K. The results for sections three, four, and five of the survey are discussed in the next chapter.

3.5 DATA ANALYSIS PROCEDURES

Information from the two online surveys was used to answer the research questions. A mixed methods approach was used when reviewing and analyzing the data.

3.5.1 Procedures for Research Question 1

A descriptive and qualitative approach was used to answer research question one: Are the competency skills on the O&M CCEM representative of the content area it is designed to measure? Are any competency skills missing? To answer these questions, content validity evidence was gathered and open-ended responses were reviewed.

O&M university faculty were surveyed. Participants answered a series of questions about each of the 40 competency skills on the O&M CCEM. As previously mentioned, the questions pertained to the relevance, representativeness, and essentiality of the competency skills in demonstrating clinical competence in O&M. The survey responses to these three questions were entered into SPSS version 18.0 (SPSS, 2009) and analyzed to determine the level of agreement between the experts. This was done through frequency distributions and reported in terms of the frequency of responses. In addition, the survey sent to O&M clinical internship supervisors asked questions regarding the essentiality of the competency skills to demonstrating clinical competence in O&M. These responses were also analyzed in SPSS. Again, frequency distributions were calculated and reported in terms of level of agreement. An agreement level of 80% or more was desired for both groups.

3.5.2 Procedures for Research Question 2

An inferential approach was used to answer research question two: Are competency skills within the seven clinical competency domains highly related to other competency skills within the same domain? This question essentially examined internal structure evidence to determine the extent to which the O&M CCEM measures the seven constructs: communication and professional relationships, O&M assessment, instructional planning, instruction, monitoring and safety, facilitating independence, and professionalism.

Data from the survey completed by clinical internship supervisors were entered into SPSS version 18.0 (SPSS, 2009). For this analysis, only scores on the O&M CCEM competency skills were used. A factor analysis was performed to examine the relationship among the competency skills and the competency domains. The researcher hypothesized that the factor analysis would show that competency skills within each of the seven domains were more homogeneous, or more related to one another, than competency skills across domains.

First, a scree plot and eigenvalues were obtained to reveal the number of factors to extract. The structure of the O&M CCEM assumes there are seven factors, so a multi-factor rotated solution was used to determine if a simple structure solution could reveal each competency skill loading on only one factor. Using a Pattern Matrix, factor loadings revealed the relationship between the competency skills and domains. Each loading was examined to identify "salient" loadings, or loadings with a value >.3. Factors with a small number of salient loadings were determined to be "trivial" factors and were therefore not retained for the final solution. Several factor analyses were performed, diminishing the number of factors to be extracted, until a set of dimensions were isolated that made sense from a theoretical perspective.

3.5.3 Procedures for Research Question 3

An inferential approach was used to answer research question three: Is there a relationship between scores on the O&M CCEM and the ACVREP clinical competency evaluation form? This question examined external structure evidence. Since the ACVREP clinical competency form contains the same seven competency domains and essentially assesses the same competencies, there should be a relationship between scores on the ACVREP form and the O&M CCEM. Data from the clinical internship supervisors' survey was used in this analysis. To examine this relationship, the researcher calculated a total score for each participant on the ACVREP portion of the survey. For the O&M CCEM, a mean score was obtained. This was necessary because scores on some of the competency skills were missing. Correlations between these sets of scores were calculated. Because it was ordinal data, Spearman correlation coefficients were calculated.

3.5.4 Procedures for Research Question 4

An inferential approach was used to answer research question four: Is there consistency in the rating for each item and total test score? Do all items measure various aspects of clinical competency consistently? To answer this research question, internal consistency reliability evidence was gathered and analyzed. Scores from the O&M CCEM section of the survey were entered into SPSS version 18.0 (SPSS, 2009). Cronbach's coefficient alpha was used to analyze the data in order to examine the relationship among the competency skills. The relationship among the competency skills within each domain was examined. Alpha values greater than .8 indicated adequate internal consistency reliability. In addition, item and item-total correlations were examined to reveal if any flawed items were present. Positive correlations between .30 - .50 were desired. If this was not the case for a particular competency skill, it was presumed to be

flawed. Cronbach's alpha was reexamined once the flawed items were deleted in order to reveal if a change in value occurred.

3.5.5 Procedures for Research Question 5

An inferential approach was used to answer research question five: Is there consistency in the rating between raters? To answer this research question, inter-rater reliability evidence was analyzed. This type of reliability refers to consistency of two (or more) independent scorers and is important when scoring on an instrument is subjective, such as with rating scales (Gay, 1992). Scores from the O&M CCEM section of the survey were coded and entered into SPSS version 18.0 (SPSS, 2009). In cases where there were two supervisors responsible for supervising one O&M intern, scores on the O&M CCEM section of the survey were compared. Estimates of inter-rater reliability for each pair of raters were expressed as percentages of agreement. In addition, an average percentage of agreement across raters was obtained.

3.5.6 Procedures for Research Question 6

A descriptive approach was used to answer research question six: Is the O&M CCEM a practical tool to use to evaluate the clinical competencies of O&M interns? Practicality evidence was gathered from the questions posed to both the O&M faculty and O&M clinical internship supervisors asking for feedback regarding the usefulness of the tool in evaluating the clinical competency of their O&M interns. Responses from both surveys were coded and entered into SPSS version 18.0 (SPSS, 2009). The frequency of responses was determined. In addition open-ended questions that asked for any additional feedback were examined for patterns of responses.

4.0 RESULTS

The purpose of this study was to create a new O&M clinical competency evaluation tool and examine evidence of validity and reliability. In particular, content, internal structure, external structure, and practicality validity evidence was collected, as well as internal consistency and inter-rater reliability evidence. The overall goal was to create an evaluation tool that would be the new standard for evaluating clinical competencies of O&M interns in the field of O&M. Ideally the tool could be used by ACVREP to determine if O&M interns are qualified to receive national certification. In addition O&M universities could use the tool as a means for determining curriculum decisions. And finally, clinical internship supervisors could use the tool to evaluate O&M interns on numerous occasions throughout the internship to determine where remediation is needed. This chapter discusses the results for all six research questions.

4.1 QUESTION 1: CONTENT EVIDENCE

Responses from both surveys were used to analyze this evidence. On the O&M university faculty survey, participants were asked three questions regarding content. As a reminder, six of the 12 participants answered questions pertaining to competency skills 1 through 17, and the other six answered questions pertaining to competency skills 18 through 40.

The first question asked how much they agreed that the competency skill was relevant to the profession of O&M and to the professional standards. This question was asked for each competency skill and the response choices were “strongly disagree”, “disagree”, “agree”, and “strongly agree”. To calculate the percentage of agreement, the responses were collapsed to evaluate the extent of agreement. Responses for “strongly agree” and “agree” were grouped and responses for “disagree” and “strongly disagree” were grouped. The results showed that on all 40 competency skills, five of the six participants indicated that they “agreed” or “strongly agreed” with the statement, indicating an 83.33% agreement.

Notably, on two competency skills, one participant indicated he/she “disagreed” or “strongly disagreed”. Specifically, on Skill 33, Fostering High Expectations, the participant indicated that he/she disagreed that the skill was relevant to the professional standards. The explanation provided was that the term “high” should not be included in the skill, but rather the skill should focus on setting *appropriate* levels of expectations. Also, on Skill 40, Record Keeping and Reporting, the participant indicated that he/she strongly disagreed that the skill was relevant to the professional standards. No explanation though was provided. However, the response of this one participant did not affect the overall desired level of agreement of 80%.

The second question regarding content asked if the competency skill was representative of the competency domain. This was asked for each competency skill and the response choices were “yes” and “no”. The results demonstrated a 100% level of agreement on 39 of the 40 competency skills. For Skill 33, there was an 83.33% agreement. One participant selected “no”, that Fostering High Expectations was not representative of the competency domain Facilitating Independence, and more appropriately belonged under Domain 3, Instructional Planning.

Finally, O&M university faculty were also asked to indicate the essentiality of the competency skill in demonstrating clinical competence in O&M. The response options were “not essential”, “somewhat essential”, “essential”, and “absolutely essential”. To calculate the percentage of agreement the categories were again grouped to examine the extent of agreement. Again five of the six participants selected “essential” or “absolutely essential” for all of the 40 competency skills, indicating an 83.33% level of agreement.

Interestingly, all participants selected “absolutely essential” for six of the competency skills. Those skills were: Skill 22 Teaching Outdoor Mobility Techniques, Skill 23 Teaching Indoor Orientation Skills, Skill 24 Teaching Outdoor Orientation Skills, Skill 30 Monitoring O&M Skills, Skill 31 Recognizing Potentially Dangerous Situations, and Skill 32 Intervening. The researcher speculated that these skills were selected as absolutely essential because they are the essence of O&M instruction and the internship experience. None of the participants selected “not essential” for any of the competency skills.

Similar to the question related to relevance, one participant chose “somewhat essential” for some of the competency skills. One of those skills was Skill 33 Fostering High Expectations. Since this skill was given a low rating by the participant in the other two content related questions as well, it was evaluated further when the open-ended questions were examined.

As mentioned before, the survey contained open-ended questions related to the competency skills and performance levels. These questions were necessary to determine if any competency skills were missing and if the wording within the performance levels needed to be changed. Based on the participants’ feedback, revisions were made to the O&M CCEM. Specifically, two skills were deleted, eight competency skills were renamed, ten skills were added and four were condensed into two skills.

The skills that were deleted were Skill 18 Introducing Lessons and Skill 33 Fostering High Expectations. For Skill 18, four of the participants commented that the skill was relevant to the profession, but the focus of the skill should not be solely on the introduction of the lesson. Rather, the skill should be about communicating throughout the lesson. Since more than half of the participants expressed this opinion, the skill was deleted and replaced with Skill 28 Communicating During Lessons. Skill 33 Fostering High Expectations was deleted for two reasons. Not only did it receive a low rating from one participant regarding the relevance, representativeness, and essentiality, but three participants commented that either the performance level wording under the skill was inappropriate, the competency skill was mislabeled, or the skill belonged under Domain 3 and not Domain 6.

The remaining revisions concerned slightly renaming, adding, and condensing some of the competency skills. These revisions are displayed in Tables 2, 3, and 4. The changes mainly concerned clarifying some of the wording in the performance levels, distinguishing between written and oral communication in Domains 1 and 2, changing the order of the competency skills under Domain 3, and adding some competency skills under Domains 1, 4, 5 and 6. The most significant changes occurred under Domain 4 and involved revising the skills to focus on the techniques taught rather than the environment in which they are taught.

Table 2: O&M CCEM Revisions: Renamed Competency Skills

Original Skills		Revised Skills
Skill 2: Communicating with Clients	→	Skill 2: *Orally* Communicating with Clients
Skill 3: Communicating with Families	→	Skill 3: *Orally* Communicating with Families
Skill 4: Communicating with Colleagues	→	Skill 4: *Orally* Communicating with Colleagues
Skill 5: Communicating with Supervisors	→	Skill 5: *Orally* Communicating with Supervisors
Skill 9: Communicating Results	→	Skill 10: *Orally* Communicating Results
Skill 19: Teaching Use of Vision *and Other Senses*	→	Skill 19: Teaching Use of Vision
Skill 20: *Teaching* Human Guide	→	Skill 21: Human Guide *Techniques*
Skill 40: Record Keeping and Reporting	→	Skill 46: Record Keeping and Reporting *Procedures*

Table 3: O&M CCEM Revisions: Added Competency Skills

Domain	Additional Competency Skills
Domain 1:	Skill 6: Written Communication
Domain 4:	Skill 20: Teaching Use of Other Senses Skill 24: Complex Environments Skill 25: Street Crossings Skill 26: Public Transportation Skill 28: Communicating During Lessons Skill 30: Modifying Lessons
Domain 5:	Skill 35: Positioning During Lessons
Domain 6:	Skill 38: Promoting Participation Skill 39: Fostering Self-Assessment Skills

Table 4: O&M CCEM Revisions: Condensed Competency Skills

Original Skills		Revised Skills
Skill 21: Teaching Indoor Mobility Techniques Skill 22: Teaching Outdoor Mobility Techniques	→	Skill 22: Cane Techniques
Skill 23: Teaching Indoor Orientation Skills Skill 24: Teaching Outdoor Orientation Skills	→	Skill 23: Orientation Skills

The researcher made these revisions after consulting with two doctoral committee members and prior to piloting the O&M CCEM with clinical internship supervisors. The result was 46 competency skills instead of 40. Again, the competency skills on the initial draft and revised version of the O&M CCEM can be found in Appendix H.

On the O&M clinical internship supervisors' survey, participants were also asked about the essentiality of the 46 competency skills in demonstrating clinical competence. Because the competency skills were revised in Phase 2 of the study, the researcher felt it was important to collect this content evidence from the O&M clinical internship supervisors. This content evidence was collected at the same time the O&M CCEM was piloted with the clinical internship supervisors in Phase 3 of the study.

Once again, the response categories were grouped to examine the extent of agreement. The results showed that at least 80% of the participants selected "essential" or "absolutely essential" for 42 of the 46 competency skills. The agreement level for the four other skills ranged from 68.96% to 79.31% agreement. Those skills were Skill 12 Reviewing and Interpreting Relevant Records (79.31%), Skill 14 Writing Appropriate Behavioral Objectives (72.41%), Skill 39 Fostering Self-Assessment Skills (79.31%), and Skill 45 Scheduling (68.96%).

Despite the 80% minimum level of agreement on almost all of the skills, the participants' responses were more widely varied compared to the O&M university faculty's responses. Thirty of the skills had at least one participant indicate that the skill was "somewhat essential". In addition, one participant indicated that seven of the skills were "not essential" in demonstrating clinical competency. Table 2 shows the responses for the skills that had the most variability. These results are worthy of further discussion and will be addressed in the next chapter.

Table 5: Varied Responses on the Essentiality of Competency Skills

Competency Skill	Not Essential	Somewhat Essential	Essential	Absolutely Essential
Skill 7: Planning O&M Assessments	1	0	7	21
Skill 10: Orally Communicating Results	0	5	14	10
Skill 11: Knowing Options for Mobility Systems	1	2	12	14
Skill 14: Writing Appropriate Behavioral Objectives	0	8	14	7
Skill 19: Teaching Use of Vision	1	3	13	12
Skill 34: Monitoring O&M Skills	1	0	16	8
Skill 38: Promoting Participation	1	3	14	11
Skill 39: Fostering Self-Assessment Skills	0	6	17	6
Skill 43: Maintaining Professional Conduct	1	0	7	21
Skill 44: Utilizing Resources	0	5	18	6
Skill 45: Scheduling	0	9	12	8

Besides the questions pertaining to essentiality, O&M clinical supervisors were also asked if there were any missing competency skills. Analyzing the responses across domains, 100% of the participants indicated there were no missing skills for Domains 3, 6, and 7. At least 86% of participants indicated that there were no competency skills missing for Domains 1, 2, 4, and 5. The suggestions that were made pertained to adding skills related to communicating with outside agencies (Domain 1), addressing the individual needs and limitations of clients during assessment (Domain 2), adding instruction in concept development and protective techniques (Domain 4), and meeting the safety needs of client's with physical and/or cognitive limitations (Domain 5). However, when analyzing these recommendations, there was no pattern of response. Meaning, the same recommendation was not made by two or more participants.

In conclusion, all of the results just discussed were considered when answering the research question: Are the competency skills on the O&M CCEM representative of the content area it is designed to measure? The answer to this question is yes. When examining the level of agreement across *all* competency skills, at least 80% agreement was reached. The O&M faculty had an 83.33% level of agreement. The clinical supervisors had a 92.8% level of agreement, despite the varying range of agreement within each competency skill. This implies that the O&M CCEM as a whole is representative on the content area.

The second research question asked if there were any competency skills missing. The responses on the O&M faculty survey were used to revise the O&M CCEM because there indeed appeared to be some missing competency skills. The responses from the clinical supervisors will be considered if future revisions are made.

4.2 QUESTION 2: INTERNAL STRUCTURE EVIDENCE

For this analysis, only scores on the O&M CCEM competency skills were used. A factor analysis was performed to examine the relationship among the competency skills and the competency domains. Due to the limited number of participants, the factor analysis was exploratory in nature.

First, all 46 competency skills were analyzed. Eigenvalues and a scree plot were obtained. The evidence from the eigenvalues revealed that three, four, or five factors may be needed to describe the responses. Retaining three factors accounted for 71.11% (or an additional 11.554%) of the variance, retaining four factors accounted for 78.14% (or an additional 7.028%) of the variance, and retaining five factors accounted for 83.36% (or an additional 5.213%) of the variance. In contrast, the scree plot (Figure 5) revealed that a seven factor analysis might be appropriate. When examining the relative change from one eigenvalue to another, there appeared to be little change after the seventh eigenvalue.

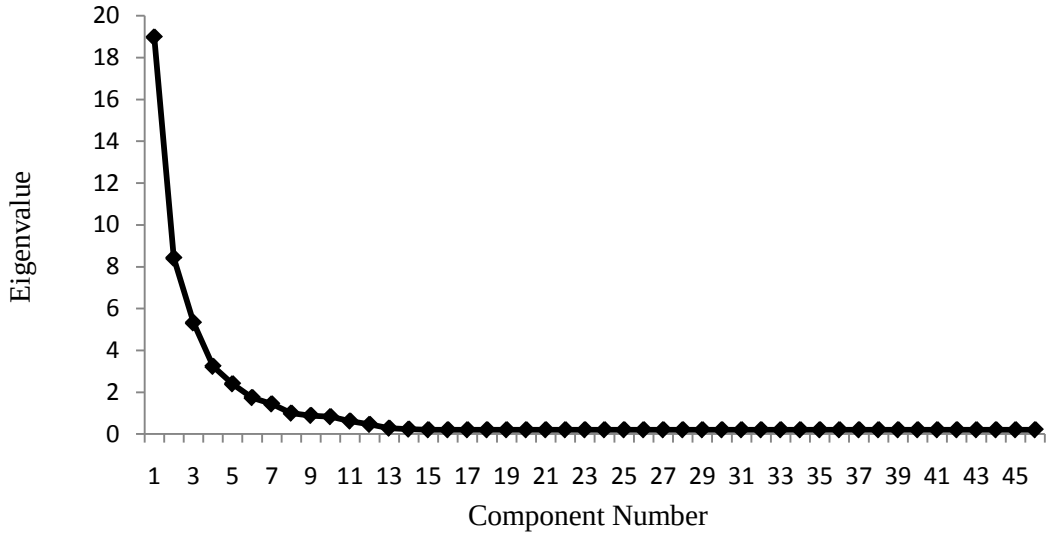


Figure 5: Scree Plot for Factor Analysis of Competency Skills

Given that the scree plot suggested a seven factor analysis might be appropriate and the structure of the O&M CCEM was organized in seven domains, the researcher decided to begin with a seven factor analysis. Using a rotated, correlated matrix, factor loadings revealed the relationship between the competency skills and domains. Each variable (competency skills) was examined to identify "salient" loadings, or loadings with a value >.3. Factors with a small number of salient loadings were determined to be "trivial" factors and were therefore not retained for the final solution. Several factor analyses were performed, diminishing the number of factors to be extracted, until the isolated dimensions could be logically explained.

In the end, the final solution consisted of three factors, meaning the factor loadings revealed a relationship between the competency skills and three underlying constructs. Table 3 shows which competency skills loaded on the three constructs. The bolded numbers indicate the highest loading for each competency skill.

The results revealed some potentially flawed skills. Some competency skills fell under two or three of the constructs instead of only one. Those skills were 6, 7, 8, 9, 10, 11, 14, 27, 31, and 37. Of particular concern were Skills 6 and 10. Skill 6 fell under all three constructs. After analyzing the performance level wording for this skill, the researcher determined that it actually wasn't measuring a component of clinical competency at all, but rather, basic grammar skills. Skill 10 contained a large negative correlation value, indicating it was potentially flawed. The researcher interpreted this to mean that Skill 10 was not measuring a skill related to clinical competency and was therefore not an appropriate item on the O&M CCEM. Based on these interpretations, Skills 6 and 10 were determined to be flawed and eliminated from all further analysis.

Table 6: Factor Loadings for Competency Skills

Competency Skill	Dimension		
	1	2	3
Skill 1: Establishing Rapport	**.783**	.225	.297
Skill 2: Orally Communicating with Clients	**.742**	.124	.126
Skill 3: Orally Communicating with Families	**.747**	.128	.119
Skill 4: Orally Communicating with Colleagues	**.646**	.164	.060
Skill 5: Orally Communicating with Supervisors	**.755**	.103	.066
Skill 6: Written Communication	**.517**	**.482**	**.449**
Skill 7: Planning O&M Assessments	**.467**	**.595**	-.108
Skill 8: Conducting O&M Assessments	**.565**	**.584**	-.135
Skill 9: Synthesizing Findings in a Report	**.565**	**.583**	-.097
Skill 10: Orally Communicating Results	**.425**	**.587**	-.541
Skill 11: Knowing Options for Mobility Systems	**.628**	**.452**	.268
Skill 12: Reviewing and Interpreting Relevant Records	**.581**	.155	.148
Skill 13: Choosing Appropriate Goals	**.740**	.427	.015
Skill 14: Writing Appropriate Behavioral Objectives	**.617**	.048	**.460**
Skill 15: Previewing and Selecting Potential Training Areas	**.750**	-.344	.011
Skill 16: Developing Individualized Lessons	**.832**	.337	.041
Skill 17: Considering Instructional Materials and Appropriate Devices	**.414**	.064	.264
Skill 18: Sequencing of Lessons	**.849**	-.040	-.077
Skill 19: Teaching Use of Vision	**.510**	.128	-.153
Skill 20: Teaching Use of Other Senses	.113	**.984**	.030
Skill 21: Human Guide Techniques	.113	**.984**	.030
Skill 22: Cane Techniques	.113	**.984**	.030
Skill 23: Orientation Skills	.113	**.984**	.030
Skill 24: Complex Environments	.205	-.109	**.907**
Skill 25: Street Crossings	.113	**.984**	.030
Skill 26: Public transportation	.113	**.984**	.030
Skill 27: Using Instructional Strategies	**.541**	**.467**	.079
Skill 28: Communicating During Lessons	**.824**	.129	.121
Skill 29: Managing Lessons	**.842**	-.324	.190
Skill 30: Modifying Lessons	**.800**	.412	-.035
Skill 31: Providing feedback to Clients	**.700**	**.619**	.013
Skill 32: Gauging Acquisition of Skills	**.816**	.112	.091
Skill 33: Reflecting on Teaching	**.578**	.260	.237
Skill 34: Monitoring O&M Skills	.113	**.984**	.030
Skill 35: Positioning During Lessons	.205	-.109	**.907**
Skill 36: Recognizing Potentially Dangerous Situations	.205	-.109	**.907**
Skill 37: Intervening	.232	**.640**	**.686**
Skill 38: Promoting Participation	.014	**.805**	.539
Skill 39: Fostering Self-Assessment Skills	-.108	**.740**	.515
Skill 40: Fostering Self-Advocacy Skills	-.049	.543	**.753**
Skill 41: Facilitating Problem Solving Skills	-.049	.543	**.753**
Skill 42: Facilitating Decision Making Skills	.278	**.727**	.025
Skill 43: Maintaining Professional Conduct	**.607**	-.161	-.199
Skill 44: Utilizing Resources	**.443**	.259	.145
Skill 45: Scheduling	**.666**	.356	.015
Skill 46: Record Keeping and Reporting Procedures	**.532**	-.228	.320

To investigate the remaining flawed skills, the researcher analyzed the three constructs from a theoretical perspective. The factor loadings showed that the internal structure was not the same as the seven domain categories on the O&M CCEM. Rather, the evidence implied that the tool actually measured the O&M interns' competency skills across three different dimensions. A closer look at the skills revealed a possible explanation. The skills asked about three different aspects of instruction: standard teaching skills, O&M specific skills, and advanced O&M instruction skills. In general, competency skills from Domains 1, 3, and 7 fell under dimension one. The competency skills under Domains 2, 4, 5, and 6 fell across two of the dimensions.

Conceptually, this made sense. The dimensions appeared to be related to the "science and art" of instruction. The "science" of teaching, in general, was captured under dimension one. Communication, assessment, instructional planning, and professionalism are common teaching skills all educators should possess. The "science" of O&M instruction was captured under dimension two. The ability to assess O&M skills, teach specific O&M techniques and monitor a client's safety is unique to O&M instruction. And finally, the "art" of O&M instruction was explained by dimension three. The skills under this dimension required the O&M intern to go beyond content knowledge and use perceptive and intuitive skills during instruction.

Turning again to the flawed skills and applying this conceptual framework, it made sense that the remaining potentially flawed skills fell under two of the dimensions. All could be seen as incorporating multiple skill-sets, and therefore, fell under multiple dimensions. For example, Skills 7, 8, and 9 pertained to O&M assessments so it certainly made sense that they fell under the O&M specific skills dimensions; however, the act of planning for assessments, conducting assessments, and synthesizing the results are all important standard teaching skills as well. This

reasoning was applied to all the remaining flawed skills and therefore, they were retained for further analysis.

Since the item level factor analysis was based on a small sample, item sets were constructed to increase the variable to sample size ration. Items were aggregated within content domains for this analysis. Score for these item sets were then analyzed to see if they loaded on the same three dimensions. Mean scores, instead of total scores, were used because some skills had missing values. Participants were given an option of selecting “don’t know” or “not applicable” if they felt they could not rate the intern on a particular skill. This response option was then recoded as missing. The number of missing values for any one skill ranged from zero to seven. Twenty two of the 46 skills had at least one missing value.

For this factor analysis, Domain 4 was divided into two sub domains and titled Domain 4a O&M Techniques and Domain 4b Instruction. This was determined to be appropriate since skills 19-26 focused on O&M specific instruction and skills 27-33 focused on general teaching skills. First, eigenvalues and a scree plot were obtained to determine the number of factors to extract. The evidence from the eigenvalues revealed that a three or four factor analysis might be appropriate. Retaining three factors accounted for 84.140% (or an additional 8.606%) of the variance and retaining four factors accounted for 89.193% (or an additional 5.053%) of the variance. The scree plot also revealed that a four factor analysis would be appropriate because there appeared to be little change after the fourth eigenvalue. The final solution was a three factor model. Table 5 shows the correlations between domain scores. Table 6 shows the factor loadings.

Table 7: Correlation Matrix for Domains

	Domain 1	Domain 2	Domain 3	Domain 4a	Domain 4b	Domain 5	Domain 6	Domain 7
Domain 1	1.000	.654	.732	.597	.779	.266	.522	.671
Domain 2	.654	1.000	.677	.633	.671	.132	.373	.585
Domain 3	.732	.677	1.000	.628	.851	.168	.474	.657
Domain 4a	.597	.633	.628	1.000	.654	.359	.764	.513
Domain 4b	.779	.671	.851	.654	1.000	.326	.535	.761
Domain 5	.266	.132	.168	.359	.326	1.000	.455	.273
Domain 6	.522	.373	.474	.764	.535	.455	1.000	.317
Domain 7	.671	.585	.657	.513	.761	.273	.317	1.000

Table 8: Factor Loadings for Domain Mean Scores

	Dimension		
	1	2	3
Domain 1	**.796**	.338	.125
Domain 2	**.754**	.364	-.133
Domain 3	**.833**	.349	-.020
Domain 4a	.467	**.799**	.123
Domain 4b	**.858**	.322	.191
Domain 5	.103	.240	**.940**
Domain 6	.207	**.885**	.286
Domain 7	**.874**	.019	.253

The results were similar to those of the first factor analysis. The mean scores for Domains 1, 3, and 7 appeared to be related to dimension one, standard teaching skills. In addition, this factor analysis showed mean scores for Domains 2 and 4b fell under dimension one. The mean scores for Domains 4a and 6 appeared to be related to dimension two, O&M specific skills. And finally, mean scores for Domain 5 appeared to be related to dimension three, advanced O&M instruction skills. The correlation matrix (Table 7) showed a positive but weak to moderate relationship between the dimensions, although the correlations between dimensions 1 and 2 were the strongest. Both of these dimensions were again related to the "science" of instruction.

Table 9: Factor Correlation Matrix for Domains

Dimensions	1	2	3
1	1.000	.587	.175
2	.587	1.000	.263
3	.175	.263	1.000

In summary, the evidence from the first factor analysis revealed that the competency skills within a few of the seven domains were not related to other competency skills within the same domain. This was particularly true for Domains 2, 4, 5, and 6. Skills within these domains seemed to measure two or three different dimensions of concepts. The second factor analysis further explored the dimensions. Overall, it appeared as though the internal structure was not consistent with the content domain categories on the O&M CCEM. Rather, the skills reflected three different aspects of instruction, standard teaching skills, O&M specific skills, and advanced O&M instruction skills. This was confirmed in the factor correlation matrices. In particular, there was basically no relationship between standard teaching skills and advanced O&M instruction skills. From a theoretical perspective this made sense. Advanced O&M instruction skills require the O&M intern to be perceptive and intuitive and demonstrate a higher level of thinking.

Based on this evidence, a total score for all competency skills would not be appropriate. Scores on each of the three dimensions would allow for better interpretation of scores as they relate to clinical competency. Again, due to the limited number of participants these factor analyses were exploratory in nature but revealed interesting results. The structure that resulted from the second factor analysis between the domains and the dimensions was used for analysis of the remaining validity and reliability evidence. Skills under Domains 1, 2, 3, 4b, and 7 were grouped under dimension 1, skills under Domains 4a and 6 were grouped under dimension 2 and skills under Domain 5 was grouped under dimension 3.

4.3 QUESTION 3: EXTERNAL STRUCTURE EVIDENCE

Responses from the survey sent to O&M clinical internship supervisors were used for this analysis. On the ACVREP portion of the survey, participants selected "met" or "not met" for each of the 15 competency statements. The researcher calculated a total score for each intern by summing the number of responses for "met". The maximum possible score was 15 and the scores ranged from 12 to 15. For the O&M CCEM, a mean score was obtained for each competency dimension: standard teaching skills, O&M specific skill, and advanced O&M instruction skills. Mean scores were used because some of the competency skills had missing values. In essence, the mean score was substituted for all missing values. Correlations between these sets of scores were calculated to examine external validity evidence. Because it was ordinal data, Spearman correlation coefficients were used.

Table 8 shows the results. The correlation coefficients revealed that there was a positive relationship between dimension scores on the O&M CCEM and the ACVREP clinical competency evaluation form. As scores on the ACVREP form increased so did scores on the O&M CCEM dimensions. These results made sense since both tools measured similar attributes of clinical competence. However, the tools were not identical because a perfect positive correlation of +1.00 did not result.

Table 10: Correlation Coefficients for Dimension Mean Scores and ACVREP Total Score

	Standard Teaching Skills	Specific O&M Skills	Advanced O&M Instruction Skills
ACVREP Total Score	.473**	.600**	.548**

**p<.01

As noted in Table 8, these correlations were significant at .01. The lowest correlation was between the ACVREP total score and the mean score on the standard teaching skills dimension (r = .473). To determine a possible explanation, the researcher reviewed the competency statements on the ACVREP form and noticed several of the standard teaching skills were lumped into one competency statement. The researcher believed that the lack of focus on standard teaching skills within the ACVREP form contributed to the low correlation.

On the other hand, the highest correlation was between the ACVREP form and the mean score on the specific O&M skills dimension (r = .600). This made sense since the focus of the ACVREP form was to assess these particular skills.

In summary, the researcher's goal in collecting this evidence was to validate that the O&M CCEM measured the same or a similar construct as the ACVREP evaluation form. The results showed there was a positive, moderate relationship between scores on the ACVREP clinical competency evaluation form and the O&M CCEM.

4.4 QUESTION 4: INTERNAL CONSISTENCY RELIABILITY

Scores from the O&M CCEM section of the survey were used and reliability statistics were performed to gather this evidence. First, the relationship among the competency skills within each domain was examined. Again, Domain 4 was divided into two sub domains, Domain 4a O&M Techniques and Domain 4b Instruction. As a reminder, Skills 6 and 10 were deleted from further analysis based on the results of the internal structure evidence. Overall, the Cronbach's coefficient alpha for each Domain (see Table 9) indicated adequate internal consistency within Domains 1 through 6. Domain 7 had a slightly lower alpha value.

Table 11: Reliability Statistics by Domain

Domain	Skills	Cronbach's Alpha
Domain 1	Skills 1-5	.898
Domain 2	Skills 7-9	.945
Domain 3	Skills 11-18	.932
Domain 4a	Skills 19-26	.851
Domain 4b	Skills 27-33	.895
Domain 5	Skills 34-37	.810
Domain 6	Skills 38-42	.922
Domain 7	Skills 43-46	.716

When item and item-total correlations were examined, the results revealed some potentially flawed competency skills. These were: Skill 19 Teaching Use of Vision, Skills 24 Complex Environments, Skills 34 Monitoring O&M Skills, and Skill 42 Facilitating Decision Making. The item-total statistics showed that the alpha levels increased between .030 and .088 when these items were deleted. This meant, if the flawed items were deleted, the consistency of ratings for the remaining competency skills increased. However, the researcher chose to perform further reliability statistics before deleting the items. Cronbach's alpha and item-total correlations were calculated for the three subscale dimensions of the tool.

The alpha values for standard teaching skills, O&M specific skills, and advanced O&M instruction skills were .957, .950, and .860, respectively. This evidence showed internal consistency between competency skills within dimensions. When item and item-total correlations were examined, the results did not reveal any flawed competency skills. Overall, the reliability statistics showed that scores on the competency skills correlated with other competency skill scores within the dimension.

In summary, there appeared to be consistency in the ratings for competency skills within domains and within dimensions. This evidence implied that all the competency skills could be used to measure aspects of clinical competency consistently.

4.5 QUESTION 5: INTER-RATER RELIABILITY

In cases where there were two supervisors responsible for supervising one O&M intern, scores on the O&M CCEM section of the survey were compared. There were six pairs of supervisors. The percentages of agreement of the competency skill ratings and the average percentage of agreement across raters were obtained. The results are displayed in Table 10.

Table 12: Percentages of Agreement for Pairs of Raters with 4 Levels of Performance

	Pair 1	**Pair 2**	**Pair 3**	**Pair 4**	**Pair 5**	**Pair 6**	**Overall**
Percentage of Agreement (4 levels of performance)	63%	63%	65%	76%	74%	61%	67%

The results revealed a low percentage of agreement. To determine where the discrepancies were, percentages of agreement within Domains were calculated. This was done to examine if there were specific domains that had lower levels of rater agreement. Domain 4 skills were divided into two sub domains: Domain 4a O&M Techniques and Domain 4b Instruction. Again, this was determined to be appropriate since skills 19-26 focused on O&M specific instruction and skills 27-33 focused on general teaching skills. The results are presented in Table 11.

Table 13: Percentages of Agreement for Pairs of Raters by Domain

Percentage of Agreement	Pair 1	Pair 2	Pair 3	Pair 4	Pair 5	Pair 6	Overall
Domain 1	67%	67%	33%	83%	83%	33%	61%
Domain 2	33%	100%	100%	33%	100%	100%	78%
Domain 3	63%	25%	63%	63%	50%	88%	58%
Domain 4a	75%	63%	100%	88%	100%	38%	77%
Domain 4b	86%	43%	29%	57%	57%	57%	55%
Domain 5	100%	100%	100%	100%	100%	50%	92%
Domain 6	20%	100%	100%	100%	100%	80%	84%
Domain 7	50%	50%	0%	100%	50%	75%	54%

Interestingly, the results revealed that the lowest percentages of agreement were for the domains containing competency skills related to standard teaching skills. Domains 1, 3, 4b, and 7 focused on the O&M intern's ability to communicate, plan for instruction, provide instruction, and act professionally. The competency skills within these domains are important for any instructor, regardless of the profession. However, clinical competency in O&M has historically focused on O&M specific skills, not standard teaching skills. So if the field of O&M in general hasn't defined what "effective" communication, lesson preparation, and instruction means then the raters are less likely to agree on the O&M intern's performance. In other words, perhaps the personal preferences, options, and habits of the supervisors themselves influenced their ratings. Perhaps if the supervisors had received training on the O&M CCEM and participated in discussions related to "effective" teaching the levels of agreement would have been higher.

Another explanation for the low percentages of agreement and the discrepancy in the ratings could be the role of supervisors. For all six pairs, one supervisor worked with the O&M intern daily. The other supervisor oversaw the internship experience, filled out the ACVREP

evaluation form, and performed observations only periodically. With fewer opportunities for observation, perhaps their ratings were lower or caused more discrepancy in the ratings. Unfortunately, the researcher did not have the supervisors identify which role they played so this possible explanation could not be examined.

To understand the discrepancies further, the researcher examined the specific performance level ratings within pairs. A closer look at the data revealed that most response choices were within one performance level. For example, if rater 1 chose a level 4 rating, rater 2 typically chose level 3 or vice versa. This was true for Pairs 1, 4, and 5. However, there were three occasions for Pairs 2, 3, and 6 where the ratings were off by two performance levels. For example, if rater 1 chose level 4, rater 2 might have chosen level 2. This larger discrepancy in ratings concerned the researcher. To receive a level 4 rating, the intern had to *always* perform the skill and perform it well. To receive a level 2 rating, the intern had to *inconsistently* perform only some components of the skill. Therefore, such a discrepancy in ratings was alarming.

To examine this further, the researcher decided to recalculate the percentages of agreement after reorganizing the data. When the wording for performances levels 3 and 4 was examined, the researcher noticed only a subtle difference. Typically level 3 stated that the intern *consistently* performed the skill, whereas level 4 stated that the intern *always* performed the skill. Therefore, the researcher felt it was appropriate to collapse levels 3 and 4 and recalculate the percentages of agreement. However, this subtle difference in wording did not occur between levels 1 and 2 or levels 2 and 3. Level 1 stated that the intern was *unable* to perform the skill and level 2 stated that the intern *inconsistently* performed the skill. Table 12 displays the results once levels 3 and 4 were collapsed.

Table 14: Percentages of Agreement for Pairs of Raters with Levels 3 and 4 Collapsed

	Pair 1	Pair 2	Pair 3	Pair 4	Pair 5	Pair 6	Overall
Percentage of Agreement (Levels 3 and 4 Collapsed)	100%	67%	78%	100%	100%	76%	87%

The results showed an increase in the percentages of agreement. This was particularly true for Pairs 1, 4, 5. Again, to determine where the discrepancies were, percentages of agreement within Domains were calculated with levels 3 and 4 collapsed. The results are displayed in Table 13. Once again, the lowest percentages of agreement were in Domains 1, 3, 4b, and 7. However, this time, the analysis of the domains showed 100% agreement in Domain 2 and nearly 100% agreement in Domains 4a, 5 and 6.

Table 15: Percentages of Agreement for Pairs of Raters by Domain with Levels 3 and 4 Collapsed

Percentage of Agreement	Pair 1	Pair 2	Pair 3	Pair 4	Pair 5	Pair 6	Overall
Domain 1	100%	67%	50%	100%	100%	67%	81%
Domain 2	100%	100%	100%	100%	100%	100%	100%
Domain 3	100%	25%	88%	100%	100%	88%	83%
Domain 4a	100%	88%	100%	100%	100%	71%	93%
Domain 4b	100%	43%	43%	100%	100%	57%	74%
Domain 5	100%	100%	100%	100%	100%	75%	96%
Domain 6	100%	100%	100%	100%	100%	80%	97%
Domain 7	100%	50%	50%	100%	100%	100%	83%

In summary, the inter-rater reliability evidence showed there was not a high degree of consistency in the performance ratings between supervisors. Although the percentages of agreement increased after performance levels 3 and 4 were collapsed, some pairs still had very low scores. The possible explanations for this discrepancy could be the subjectivity of the performance level wording and the role of the supervisors rating the intern. Further investigation

into the performance level wording would be warranted on future revisions of the tool. In addition, training on the use of the tool should be considered.

4.6 QUESTION 6: PRACTICALITY EVIDENCE

This evidence was gathered to analyze the practicality of the tool. Responses from both the O&M faculty's survey and the O&M clinical supervisors' survey were used. Both surveys asked the participants (a) if the four-performance level format was appropriate for assessing clinical competencies of O&M interns and (b) if the participant would consider using the tool as a means for evaluating O&M interns.

Concerning the four-performance level format, all 12 of the O&M faculty indicated a four-performance level format was appropriate for assessing the clinical competency of O&M interns. Of the 16 clinical internship supervisors, 15 indicated that the performance format was appropriate. A few comments regarding the format were: "I think breaking down the competencies into [this] rubric format would be more objective than the current list of skills, which are evaluated in a more subjective manner at this time", "the 4-tiered format is very helpful and useful", and "this rubric would be a significant improvement over the basic checklist currently used".

Concerning whether the tool would be used, 11 of the 12 O&M faculty and 13 of the 16 clinical supervisors indicated that they would use the O&M CCEM as a means to assessing the clinical competencies of O&M interns. The reasons given for not using the tool focused mainly on the performance level wording not the competency skills. A couple of participants

recommended that the performance levels should be changed to reflect levels of competency rather than frequency.

Although all comments will be considered for revision purposes, most of the participants had raving reviews. Some of those comments were: “this is perhaps the most thorough survey instrument of its kind I have ever seen and the results should be of great value to the profession”, “[this is] a very thorough evaluation form. It is very user-friendly, concise, and well organized”.

This information combined with the results from the other research questions revealed that the O&M CCEM is a practical tool. The participants stated that it is easy to use, efficient in evaluating clinical competencies of O&M interns, and more objective than the ACVREP evaluation form.

5.0 DISCUSSION

5.1 SUMMARY OF THE STUDY

Persons with visual impairments and blindness require specialized instruction in the techniques of orientation and mobility (O&M) in order to travel through various environments as independently as possible. O&M specialists are the professionals who provide such instruction. O&M specialists follow a standard sequence of assessment, planning, and instruction that is tailored to each client. However, due to the unique travel and visual needs of persons with visual impairments, O&M specialists must also demonstrate the ability to perceive potentially dangerous situations when traveling in a given environment, constantly monitor their clients' safety, and know when to intervene if their clients become disoriented.

In order to become an O&M specialist, one must receive academic training at an O&M university and complete a clinical internship. Once these requirements are met, O&M interns are evaluated on both their academic and clinical competencies in order to receive national certification. The particular focus of this study was the evaluation of the *clinical* competencies.

The tool currently used in the field of O&M follows a checklist format and asks clinical internship supervisors to decide if the competencies were "met" or "not met". On this checklist, critical aspects of performance are not identified and an acceptable range of responses is not provided. The clinical competency statements are vague and do not assess the intern's level of ability within the competency areas, nor do they identify specific skills within the competencies.

In addition, the decision as to whether the competency was “met” or “not met” is based on the clinical supervisor’s perception of what the vague competency statements mean. This study aimed to create a new evaluation tool that accounted for these issues.

First, the O&M CCEM was developed using results from previous research (Eichorn and Vigoroso, 1975; Crouse and Kappan 1975; Kimbrough, 1980; Uslan, et al., 1989; Weiner & Siffermann, 2000; Zebehazy, et al., 2005; Zebehazy, et al., 2008; Renshaw, et al., 2009). Based on the research, specific competency skills and performance levels were identified to create the evaluation tool. Then, O&M university faculty were surveyed to gather content evidence.

After revisions were made to the O&M CCEM, the evaluation tool was piloted with O&M clinical internship supervisors. Content, internal structure, external structure, and practicality validity evidence was collected, as well as internal consistency and inter-rater reliability evidence. To gather this evidence, the researcher addressed the following questions:

Q1: Are the competency skills on the O&M CCEM representative of the content area it is designed to measure? Are any competencies skills missing?

Q2: Are competency skills within the seven clinical competency domains highly related to other competency skills within the same domain?

Q3: Is there a relationship between scores on the O&M CCEM and the ACVREP clinical competency evaluation form?

Q4: Is there consistency in the rating for each item and total test score? Do all items measure various aspects of clinical competency?

Q5: Is there consistency in the rating between raters?

Q6: Is the O&M CCEM a practical tool to use to evaluate the clinical competencies of O&M interns?

This chapter elaborates on the findings related to these questions and connects the results. Furthermore, the limitations of the study, implications of the research, and suggestions for future research are discussed.

5.2 SYTHESIS OF RESULTS

5.2.1 Validity Evidence

The researcher accumulated validity evidence in order to confirm that scores could be accurately interpreted as demonstrating clinical competency in O&M. Specifically, the study examined validity evidence related to content, internal structure, external structure, and practicality of use. All of these pieces of validity evidence were important for establishing validity of scores.

5.2.1.1 Content Evidence The content evidence showed that the competency skills on the O&M CCEM as a whole were representative of the professional standards and were essential in demonstrating clinical competency. There was more than 80% agreement among the O&M faculty that the skills were relevant, representative, and essential. At least 80% agreement was also achieved among the O&M clinical supervisors on 42 of the 46 skills; however four skills did not meet the 80% agreement mark. Those skills were Skill 12 Reviewing and Interpreting Relevant Records (79.31%), Skill 14 Writing Appropriate Behavioral Objectives (72.41%), Skill 39 Fostering Self-Assessment Skills (79.31%), and Skill 45 Scheduling (68.96%).

Of course, the reason that these four skills did not have 80% agreement is because a number of participants selected “somewhat essential” or “not essential”. To try to explain why these responses were selected, the researcher analyzed the demographic information of the participants. All of the clinical internship supervisors that selected these responses worked in an

adult rehabilitation agency or a Veterans Administration Hospital, and most had more than 20 years of experience in the field of O&M. Logically this made sense, particularly for the two lowest rated skills, Skill 14 Writing Appropriate Behavioral Objectives and Skill 45 Scheduling. Generally speaking, in adult rehabilitation settings, a more standard protocol of instruction is followed, so perhaps writing objectives and scheduling is not as essential in those settings compared to public school settings or schools for the blind. In addition, writing behavioral objectives has been more of a focus in recent years, because of accountability issues, so perhaps supervisors with over 20 years of experience view the essentiality of that skill differently.

The variability in responses between the groups of participants is also worthy of further discussion. In general, the O&M university faculty rated all skills as “essential” or “absolutely essential”; where-as the O&M clinical supervisors’ responses ranged from “somewhat essential” to “absolutely essential”. These results are consistent with the previous research by Kimbrough (1980) and Uslan, Hill, & Peck (1989). Kimbrough found that these groups perceived the essentiality of the skills differently. This was also confirmed by Uslan, Hill & Peck, who, in addition, found differences not only between these two groups, but also between administrators, parents of children with visual impairments, and persons with visual impairments. In essence, the essentiality of the individual competency skills varied based on who was asked.

In the current study, the perspective of the participant may have again contributed to the variability. O&M clinical supervisors are involved in the day-to-day clinical instruction where as O&M faculty members are not. Perhaps this fundamental difference results in weighing the competency skills differently. Another possible explanation is simply the small number of participants. If more O&M university faculty had participated, perhaps more variability would have resulted. And finally, the survey format itself may have contributed to this variability. The

O&M faculty survey asked about the competency skills one at a time; however, the clinical internship supervisors' survey asked about the essentiality of each skill within a given domain. In other words, all skills for a domain where listed and the participant completed the matrix of response options. Perhaps they unconsciously compared the essentiality of the skill to the other skills within the same domain.

Although the difference between somewhat essential and absolutely essential may seem subtle, it could have a dramatic impact. Not only could this be an issue when determining what competency skills are actually important for demonstrating clinical competency, but it could affect how individuals are rated on those competency skills. For example, if two raters with different perceptions of essentiality are rating an O&M intern, they could place varying amounts of emphasis on the performance levels. This possibility supports the need for an objective evaluation tool. Although the O&M CCEM was designed to be less subjective than the ACVREP form, it still was not a truly objective form of measurement. This issue will be addressed further when inter-rater reliability evidence is discussed and future research is suggested.

5.2.1.2 Internal Structure Evidence The internal structure evidence was analyzed based on the responses on the O&M CCEM. Overall, the internal structure was not what the researcher hypothesized. It was not consistent with the seven domain categories on the O&M CCEM. This was not surprising since the seven domains were established based on opinion and not statistical evidence. Instead, the results showed that the domains did not measure seven constructs of clinical competency, but rather, three different aspects of clinical competency: standard teaching skills, O&M specific skills, and advanced O&M instruction skills.

These results alone could profoundly impact the way O&M interns are prepared and assessed. Traditionally, the evaluation of clinical competencies has focused heavily on the

interns' abilities to teach O&M specific skills and perform advanced O&M instruction skills, not on general teaching skills. A review of the competency areas on the ACVREP form supports this theory. There are more statements related to O&M specific skills and advanced O&M instruction skills than general teaching skills. Although O&M specific and advance O&M instruction skills are certainly important, general teaching skills should not be overlooked.

Further analysis of the competency skill ratings on the O&M CCEM revealed interesting results. The range of scores for the competency skills under the standard teaching dimension ranged from level 1 to level 4, but some of the competency skill ratings under the other two dimensions ranged only from level 3 to level 4. Those skills were: Skill 21 Human Guide Techniques, Skill 22 Cane Techniques, Skill 24 Complex Environments, Skill 34 Monitoring O&M Skills, Skill 36 Recognizing Potentially Dangerous Situations, Skill 37 Intervening, and Skill 40 Fostering Self-Advocacy Skills. These skills were also determined to be the most important skills in the previous O&M studies (Eichorn and Vigoroso, 1975; Crouse and Kappan 1975; Kimbrough, 1980; Uslan, et al., 1989; Weiner & Siffermann, 2000).

Theoretically, there are four possible explanations for the varying range of scores under these dimensions. One, O&M university faculty may focus more on these O&M specific skills when preparing O&M students and less on standard teaching skills; therefore, the O&M interns are less prepared to demonstrate competency in the skills related to standard teaching. Two, O&M clinical supervisors could rate the O&M interns' competencies on O&M specific and advanced O&M instruction dimensions more favorably because the skills are perceived as the core of O&M instruction. This relates back to the issue of subjectivity in ratings as an issue. Three, O&M clinical supervisors could have a better grasp of what competency in the O&M specific skills and advanced O&M instruction dimensions looks like, as opposed to competency

in the standard teaching dimension. Four, perhaps it is as simple as the abilities of the O&M interns themselves. Maybe the ability to teach O&M specific skills and perform advance O&M instruction skills is fundamentally different then the ability to demonstrate standard teaching skills.

These theories suggest, and the internal structure evidence supports, that clinical competency is actually three different aspects of instruction. Based on the internal structure evidence, the researcher determined that a total score for all competency skills would not be appropriate. Scores on each of the three dimensions would allow for better interpretation of scores as they relate to clinical competency. In summary, ratings on competency skills under Domains 1, 2, 3, 4b, and 7 should be interpreted as demonstrating standard teaching skills. Ratings on competency skills under Domains 4a and 6 should be interpreted as demonstrating O&M specific skills. And, ratings on competency skills under Domain 5 should be interpreted as demonstrating advanced O&M instruction skills. The structure of the O&M CCEM should be reformatted to show the three dimensions and altered to allow for more accurate interpretation of clinical competency.

5.2.1.3 External Structure The external structure evidence examined the relationship between total scores on the ACVREP evaluation form and the mean scores for the dimension categories. Dimension scores on the O&M CCEM were used instead of a total score because of the results from the internal validity evidence. The results revealed there was a positive relationship between the scores. In other words, higher scores on the ACVREP form were paired with higher mean scores on the various dimensions of the O&M CCEM.

Of the three dimensions, the strongest relationship was between mean scores on the O&M specific skills dimension and total scores on the ACVREP form. Conceptually this made sense since the ACVREP form focuses on these skills. The weakest relationship was between mean scores on the standard teaching skills dimension and total scores on the ACVREP form. Again, this made sense since the ACVREP form does not focus on these skills.

5.2.2 Reliability Evidence

The researcher investigated reliability evidence to evaluate the consistency of scores. Specifically, this study examined internal consistency of scores across competency skills and the consistency of scores across supervisors.

5.2.2.1 Internal Consistency The internal reliability evidence showed that there was consistency in the ratings for competency skills, both within domains and within dimensions. This evidence implied that all the competency skills consistently measured some aspect of clinical competency. First, evidence within domains was examined. The results showed that scores on the competency skills within the same domains were consistent. For example, the competency skills within Domain 1 produced similar scores. This was true for competency skills within each of the domains. There was high reliability for competency skills within Domains 1-6. There was adequate reliability within Domain 7.

Next, the consistency of scores within dimensions was examined. The results showed that the scores on the competency skills within dimensions were consistent. Meaning, competency skills within the standard teaching skills dimension produced similar scores, competency skills within the O&M specific skills dimension produced similar scores, and competency skills within the advanced O&M instruction dimension produced similar scores. There was high reliability within each of the three dimensions.

5.2.2.2 Inter-rater Reliability The inter-rater reliability evidence did not demonstrate consistency in ratings across raters. Specifically, the ratings across all competency skills revealed 61%-76% agreement between pairs of raters. The ratings within the domains revealed 33%-100% agreement between pairs of raters.

There are several possible explanations for these low levels of agreement. First, the discrepancy in ratings could be related to an issue discussed in the previous O&M research. Zebehazy, et al (2005) found that participants perceived errors differently, either in the execution of techniques or in instructor positioning. Zebehazy, et al (2008) also found varying opinions among participants on the most important errors O&M students should be able to recognize. And, Renshaw, et al (2009) found O&M specialists had different perspectives on the correct positioning of the instructor prior to and during street crossings. If the field of O&M can't agree on standards of practice, how can they consistently agree on performance level ratings?

Another possible explanation for the inconsistency in ratings may be the subjectivity of the performance level wording. Because most of the performance levels focused on frequency instead of competency, raters could have evaluated the O&M inters differently. This may have been avoided if a training manual had been provided that showed examples of acceptable and unacceptable performance or if standards of practice had been established. However, due to time constraints, a training manual was not provided.

A final explanation could be the role of the supervisors rating the interns. For all six pairs, one of the supervisors worked with the O&M intern daily and presumably was more qualified to rate the O&M interns' performance. The other supervisors, however, observed only periodically. Because they had less interaction with the O&M interns and fewer opportunities for observation, their ratings may have been different.

Also worthy of further discussion is the overall percentages of agreement within domains. Interestingly, the domains within the standard teaching skills dimension had the lowest overall percentages of agreement and the domains within the O&M specific skills and advance O&M instruction skills dimensions had the highest overall percentages of agreement. A possible explanation for this relates back to the discussion under the internal structure evidence. Perhaps O&M clinical supervisors have a better grasp of what competency in the O&M specific skills and advanced O&M instruction dimensions looks like, as opposed to competency in the standard teaching dimension. This may have allowed for more consistent ratings within the O&M specific skills and advanced O&M instruction dimensions compared to the standard teaching dimension.

In summary, the inter-rater reliability evidence was the weakest of all the evidence collected. Due to this, the researcher determined that further investigation into the performance level wording would be warranted and more revisions on the O&M CCEM may be necessary. Stronger reliability evidence, particularly pertaining to the consistency of scores across raters, is necessary in order to show that the O&M CCEM consistently measures clinical competency skills.

5.3 LIMITATIONS OF THE STUDY

The results and subsequent discussion of the study revealed some limitations. First, there was a substantially small sample size. Although the field of O&M is small in general and there are few graduates from O&M university programs each year, a sample of only 29 completed O&M CCEM tools lead to limitations in interpreting the validity and reliability evidence. This was

particularly true for the internal structure evidence and the factors analyses. More data were needed to accurately interpret the results and emphatically determine the structure of the tool.

Second, there were many potential sources of error that were not controlled. The random sources of error included the administration method, respondent effects, and instrument effects. Because the survey was administered online and completed independently, the researcher did not supervise the participants. The researcher could only assume that a qualified person filled out the survey. Respondent effects could also have been an issue because, if questions were misinterpreted, the researcher was not available to clarify. In addition, the clinical supervisors had to reflect on the competency of O&M interns that completed their internship months beforehand; therefore, memory lapses could have been an issue. And finally, instrument effects could have been a source of error due to the length of the survey. For most participants it took an hour to complete.

These sources of error could have affected reliability because the more random sources of measurement error, the less accuracy in scores. Validity could have also been affected because the more random sources of error, the less accurate the interpretation of scores.

Additionally, there may have been systematic sources of error. For example, if competency skill ratings were inflated because the clinical supervisors believed that the interns should have been at a certain level by the completion of the internship, validity would have been affected and accurate interpretation in scores tainted.

And finally, the most substantial limitations were revealed in the inter-rater reliability evidence. As discussed in the previous section, subjectivity of the performance level wording could have contributed to inconsistency in ratings across raters. Perhaps if the wording within the

performance levels focused less on frequency and more on competency, the ratings would have been more consistent. All of these limitations should be considered for future research.

5.4 IMPLICATIONS FOR PRACTICE

Although further revisions need to be made to address the limitations of the study and gather more evidence, the results of the validity and reliability evidence in this study show promise. This research serves as a first step in creating a tool the field of O&M needs. Based on all the evidence, some competency skills were deleted and the O&M CCEM was restructured into the three competency dimensions: standard teaching skills, O&M specific skills, and advanced O&M instruction skills. The final product is provided in Appendix L.

The implications of this study on the practice of O&M are threefold. Once perfected, the tool could be used by (a) ACVREP to determine if O&M interns are qualified to receive national certification, (b) O&M university faculty as a means for determining curriculum decisions, and (c) clinical internship supervisors as a tool for evaluating O&M interns on numerous occasions throughout the internship to determine where remediation is needed.

If the O&M CCEM were used as the new standard for evaluating clinical competencies of O&M interns, it would allow for a valid interpretation of scores and produce reliable, consistent scores. Such a tool would assure that O&M interns entering the profession are qualified, competent instructors prepared to provide the specialized instruction required in O&M.

5.5 FUTURE RESEARCH

Throughout this discussion, several concerns emerged that were not addressed in the current study. To begin, a qualitative study should be conducted to observe O&M specialists performing the competency skills. These observations would assist in identifying the various performance levels within the competency skills and determining if any competency skills are missing on the O&M CCEM. Such research is needed because, traditionally, the competency areas have been based on the opinions of individuals and not direct observations of O&M specialists actually executing the skills. The previous studies that examined competencies (Kimbrough, 1980; Uslan, et al, 1989) and the current study asked if the list of competencies were essential or important. It would be interesting to see if observations of practicing O&M specialists would reveal other competency skills not on the O&M CCEM.

Once these observations have taken place, the performance levels on the O&M CCEM should be reexamined. Much of the wording in the performance levels focused on frequency (inconsistently or consistently executing a skill). If the wording was altered to focus more on levels of competency, with the intern receiving a higher score as they demonstrate more and more components of the competency skill, perhaps the evaluation tool would be even less subjective. Although this may be difficult to achieve, it should be investigated further. A Delphi study should be conducted to allow experts in the field to come to consensus on what those competency performance levels should be. The panel of experts should include both O&M specialists and O&M university faculty.

And finally, once the two previous studies have been conducted and the performance levels on the O&M CCEM have been better clarified, the tool should be retested with a larger sample size and validity and reliability evidence reexamined. In addition, a training tool that

provides examples of O&M interns performing on the various competency levels might allow for more consistent scores across raters.

5.6 CONCLUDING THOUGHTS

As mentioned in the literature review, the profession of O&M had conducted little research on the methods for evaluating *clinical* competencies. Previous research focused primarily on identifying the competency categories and determining how essential those competencies were in the training of O&M specialists. Until this study, no research investigated the criteria for assessing clinical competencies, let alone examined validity and reliability evidence. The field of O&M was in need of an evaluation tool that accurately assessed clinical competencies of O&M interns and produced valid and reliable scores. The O&M CCEM was created for this purpose. The O&M CCEM and the evidence gathered in this study serve as a substantial first step in achieving an objective means for evaluating clinical competencies of O&M interns that allows for accurate interpretation of and consistency in scores. The researcher hopes one day that goal will be achieved.

APPENDIX A

CLINICAL COMPETENCY AREAS AND STATEMENTS

Table 16: Competency Areas and Statements (Kimbrough, 1980)

Competency	Competency Statements
Preassessment	• Design informal assessment procedures that will reveal students' abilities and inabilities • Design information assessment procedures that will reveal students' ability to identify body parts, directional concepts, and environmental objects • Accurately identify students' abilities and inabilities from formal instruments or reports that assess vision, hearing, tactile discrimination, physical fitness, intelligence, body awareness, directional awareness, and knowledge of the environment • Accurately determine students' learning styles from information assessment designed by the teacher • Accurately identify students' learning styles from formal assessment • Accurately determine the validity of students' insights into their own mobility problems • Make accurate predictions as to the extent to which students will achieve their mobility goals • Accurately assess the role of students' families in helping students achieve their mobility goals

Table 16 (continued)

Ongoing Instructional Planning	• Establish mobility goals that are compatible with students' learning styles, intelligence, ages, maturity, physical limitation, medical limitations, sensory limitations, and mobility aptitude • Design instructional sequences that are compatible with students' students' learning styles, intelligence, ages, maturity, physical limitation, medical limitations, sensory limitations, and mobility aptitude • Select instructional materials that are compatible with students' learning styles, intelligence, ages, and mobility goals • Explain to students the effects of the following on long- or short-term mobility goals: sensory restrictions, physical restrictions, intellectual limitations, motivational deficits, and attitudinal deficits • Establish mobility programs within the framework of the service facility's philosophy, goals, and financial resources • Establish students' mobility goals so they interrelate with the goals of other services within the service facility • Write behaviorally stated objectives • Selecting training environments that are compatible with students' mobility goals • Accurately match lesson time blocks with the abilities and limitations of students
Instruction and Evaluation	• Provide experiences that help students learn the optimal use of vision, hearing, touch, kinesthesis, olfaction, and gestation • Provide experiences that help students learn safe skills for maintaining orientation • Provide experiences that help students learn safe skills for crossing residential streets, commercial streets, commercial highways, secondary highways, and unpaved roads • Provide experiences that help students learn safe skills for using sighted guides, canes, low vision aids, electronic devices, escalators, revolving doors, self-service elevators, and public transportation • Provide experiences that help students learn the advantages and disadvantages of all mobility devices • Provide experiences that help students learn to identify their body parts, coordinated body movements, synchronized body movements, directional concepts • Provide experiences that help the students learn to identify environmental objects • Provide experiences that help the students learn spatial relations among environmental objects • Make accurate judgments from observations about students' safety, process, anxiety level, confidence, need for feedback, and need for close monitoring • Determine when instructional plans should change to benefit students • Provide experiences that help the students learn to apply their skills under ideal and adverse weather conditions • Design procedures that reveal students' rate of progress with them • Provide experiences that help the students determine when traffic conditions pose threats to pedestrians • Provide experiences that help the students determine when terrain conditions are unsafe for pedestrian use

Table 16 (continued)

Communication	• Orally communicate with students at their level of verbal communication • Communicate in writing with students at their level of reading or symbol comprehension • Communicate non-verbally with students in non-verbal modes they comprehend • Communication information about students' mobility that can be understood by other mobility specialists, students' families, and other professionals
Interpersonal Relations	• Create an atmosphere that encourages students to discuss personal problems related to their mobility • Advise students toward solutions to personal problems related to their mobility • Create an atmosphere that encourages students to discuss personal problems not related to their mobility • Advise students toward solutions to personal problems not related to their mobility • Enlist the support of service facility staff in reinforcing students' mobility skills and attitudes • Provide students with reinforcement in non-mobility skills they acquire through the service facility • Accurately determine which professional service(s) would compensate for competencies he/she lacks in effecting students' mobility goals • Follow standards referral procedures in securing other services needed by students • Create situations that encourage positive attitudes toward the visually handicapped within students, students' families, and the community at large • Provide experiences that help students foster realistic interests regarding their vocation, education, and recreation • Correctly advise students as to the extent to which organizations for the visually handicapped can meet their needs • Correctly advise students' families as to the extent to which organizations for the visually handicapped can meet their needs
Administration	• Accurately document his/her time spent in conducting student assessments • Accurately document his/her time spent in writing reports • Accurately document his/her time spent in planning lessons • Accurately document his/her time spent in evaluating teaching environments

APPENDIX B

ACADEMIC COMPETENCY AREAS

Table 17: Academic Competency Areas (Uslan, Hill, & Peck, 1989)

Competency Area	Competencies
Concept Development	Formal and informal assessment procedures to assess: • Body image concepts • Spatial concepts • Environmental concepts Instructional strategies, methods, and materials for teaching the following: • Body image concepts • Spatial concepts • Environmental concepts
O&M Techniques and Skills	• Sighted guide • Protective techniques • Navigational skills • Familiarization • Transportation systems • Public conveyer systems • Cane techniques
Assessment	• Observation techniques • Appropriate procedures for the assessment of O&M skills and techniques for visually impaired persons • Administer O&M assessments • Analyze, interpret, and utilize assessment reports from relevant professional fields • Develop and conduct “drop-offs”

Table 17 (continued)

Instructional Methods and Strategies	• Appropriate sequencing of O&M skills for various visually impaired persons • Adaptations and individualization of lessons • Learning theories as they relate to O&M • Development and use of media and materials relevant to O&M • Appropriate communication systems • Analyze and select various instructional environments for introducing, developing, and reinforcing O&M skills • Develop and conduct "solo" (independent) lessons and experiences
Sensory/Motor Functioning	• Formal and informal procedures for the assessment of residual vision • Optical aids for distance vision • Optical aids for near vision • Nonoptical aids for distance vision (sunglasses and visors) • Nonoptical aids for near vision • Etiology of visual impairments and its effect on visual functioning • Teaching and programming strategies for improving visual functioning with or without optical aids • Roles of vision care professionals • Roles and functions of low vision clinics • Basic development, anatomy, physiology, and perceptual processes of each sensory system and the interrelationships of the systems • Pathologies associated with each sensory system and the implications for O&M functioning • Role of the adapted physical education teacher and the audiologist, occupational therapist, physical therapist, and other allied health professionals • Mechanics of human locomotion and the psychomotor factors influencing mobility (i.e. problems of posture, gait, endurance, strength, flexibility, agility, and coordination)
Psychological Aspects	• Accurately document his/her time spent in conducting student assessment • Resources that may be used to help students with psychological problems affecting O&M • The adjustment process that may accompany visual impairment and concomitant disabilities • The impact of visual impairment and concomitant disabilities • Opportunities for the development of social skills in the context of O&M instruction • The establishment of an appropriate rapport with students • The counseling of students in regard to the setting of mobility goals, choice of mobility systems, and other mobility-related topics • Society's attitudes toward blindness and visual impairment

Table 17 (continued)

Human Growth and Development	• Age-related changes in independent travel needs • Age-related changes in students' attitudes toward O&M training • Effects of visual impairments on affective, psychomotor, and cognitive development and processes • Effects of additional handicaps on O&M processes of visually impaired students • Normal and atypical development patterns of visually impaired students • Transmission of developmental information and O&M implications to visually impaired students, other professionals, significant others, and community workers • Common medical and sensory problems that affect the mobility of visually impaired people
Systems of O&M	• Long cane • Dog guide • Electronic travel aids (ETAs) • Advantages and disadvantages of mobility systems (the dog guide, the cane, the ETA, and the human guide) for use by various blind and visually impaired individuals • Support canes, crutches, and wheelchairs as systems of mobility
History, Philosophy, and Profession of O&M	• Long cane • Major historical events leading to the establishment of university programs in O&M • Development of a personal philosophy in O&M • The Code of Ethics for O&M specialists • The accrediting process for agencies and schools serving visually impaired persons • Certification standards for O&M specialists • The history and present status of the long cane, guide programs, low vision services, and ETAs • The history and philosophy of educational and rehabilitative practice as it affects O&M services Advocacy for visually impaired persons

Table 17 (continued)

Program Development, Administration, and Supervision of O&M Programs	• O&M service delivery systems • Major legislation affecting O&M services or visually impaired person • The role of the O&M specialist and other personnel in a multidisciplinary approach to the provision of services to visually impaired persons • Different strategies available for organizing an O&M program • Local, state, and national resources for the provision of O&M services to visually impaired persons • Design O&M programs that are compatible with service delivery systems • Appropriate recording keeping systems in O&M • Program evaluation procedures • Roles, training levels, and training procedures for paraprofessionals, ancillary personnel, and volunteers as they relate to the provision of O&M services to visually impaired persons • Communicate a learner's O&M program, including goals and objectives, to significant others • Plan and conduct in-service presentation and workshops in O&M skills (i.e., for teachers, parents, etc.) • Appropriate methods to educate the public about O&M
Professional Information	• Sources in the current literature pertaining to O&M • The professional's responsibility for ongoing familiarity with information on O&M • Professional meetings relevant to O&M specialists • Strategies for evaluating new ideas, teaching techniques, and research findings • Strengths and weaknesses of research reports applicable to the practice of O&M • Current issues, trends, and public policy that have an impact on the profession of O&M

APPENDIX C

DIRECT AND INDIRECT TEACHING COMPETENCIES

Table 18: Direct and Indirect Teaching Competencies (Uslan, Hill & Peck, 1989)

	Competencies
Direct-Teaching	• Use of formal and informal assessment/instruction in concept development (i.e. body image, spatial, environmental, and time concepts • Instruction in the use of precane skills (i.e. sighted guide and protective techniques) • Instruction in the use of orientation skills (i.e. familiarization, landmarks, search patterns, numbering systems, compass directions, etc.) • Instruction in the use of cane skills (i.e. diagonal, touch technique, stairways, modifications, etc.) • Use of observation techniques when assessing students • Identifying and administering appropriate O&M assessments • Developing and conducting "drop-offs" • Adapting and individualizing O&M lessons • Applying theories of learning to O&M instruction • Teaching O&M skills in an appropriate sequence • Using appropriate communication systems (i.e. manual communication, graphic aids, etc.) • Developing and using media and materials relevant to O&M instruction • Analyzing and selecting environments for introducing, developing, and reinforcing O&M concepts and skills • Developing and conducting "solo" (independent) lesson and experiences • Use of formal and informal procedures for the assessment of residual vision • Instruction in the use of optical aids for distance vision • Instruction in the use of nonoptical aids for distance vision (i.e. visors) • Instruction in the use of optical aids for near vision

Table 18 (continued)

	• Instruction in the use of nonoptical aids for near vision (i.e. lamps) • Developing and implementing instructional strategies for improving visual functioning with or without optical aids • Applying principles of human locomotion and psychomotor functioning to develop proper posture and gait, endurance, coordination, etc. • Assisting students with the process of adjustment to their disability or disabilities • Assisting family members and significant others in understanding the impact of the student's disability or disabilities • Providing opportunities for the development of social skills in the context of O&M instruction • Counseling students in regard to the setting of mobility goals, choice of mobility systems, and other mobility-related topics • Adapting instruction with regard to age-related changes in independent travel needs • Adapting instruction with regard to age-related changes in students' attitudes toward O&M training. • Adapting O&M instruction due to the presence of additional handicaps. • Adapting instruction according to normal and typical patterns of human growth and development • Adapting instruction due to medical and sensory problems that affect the mobility of students • Providing students with information about the long cane as a system of mobility • Providing students with information about the dog guide as a system of mobility • Providing students with information about electronic travel aids (ETAs) as supplementary systems of O&M • Providing information to students about the advantages and disadvantages of mobility systems (the dog guide, cane, ETAs, and human guide • Providing orientation assistance to dog guide users • Providing instruction in the use of ETAs • Providing instruction in the use of support canes, crutches, and/or wheelchairs

Table 18 (continued)

In-Direct Teaching	• In-service activities for families, teachers, and other professionals and personnel (i.e. conducting workshops, conferences, etc.) • Public education and advocacy activities (i.e. speaking to civic groups, lobbying for legislation, etc.) • Program development activities (i.e. organizing and designing curriculum, program evaluation, use of community resources, etc) • Supervisory activities (i.e. supervising O&M staff, student teachers, and/or support personnel) • Professional development activities (i.e. reading, professional conferences, meetings, and organizational involvement, keeping up-to-date on current legislation and public policy, etc.) • Preparation and record-keeping activities (analyzing and interpreting medical and other reports, writing lesson plans, etc.) • Communication activities

APPENDIX D

ACVREP CLINICAL COMPETENCY EVALUATION FORM

Table 19: ACVREP Clinical Competency Evaluation Form (ACVREP, 2001)

Description of Clinical Competency	Met	Not Met
COMMUNICATION AND PROFESSIONAL RELATIONSHIPS		
1. Candidate is able to establish and maintain effective communication and professional relationships with students, families, colleagues, and supervisors, including individuals from culturally and linguistically diverse backgrounds.		
O&M ASSESSMENT		
2. Candidate is able to plan and conduct individualized comprehensive O&M assessments, synthesize the findings in a professionally written report, and communicate results with students, families, and members of the individualized intervention/education/rehabilitation team, as appropriate.		
INSTRUCTIONAL PLANNING		
3. Candidate is able to plan for individualized O&M instruction through the:		
3a. Review and interpretation of relevant records and reports.		
3b. Selection and preview of potential training areas (e.g., home, school, work or community).		
3c. Design and/or procurement of instructional materials and appropriate devices (with appropriate medical consultation regarding optical devices).		
3d. Provision of accurate information regarding options for mobility systems (e.g., long cane, dog guide, electronic travel devices) to the student and his/her family so that s/he can make informed choices regarding the most appropriate option for a given time.		
3e. Collaboration with the student, his/her family, and colleagues to develop appropriate goals and behavioral objectives, and development and sequencing of individual lessons based on the student's abilities, needs, and goals.		

Table 19 (continued)

INSTRUCTION
4. Candidate is able to effectively teach and reinforce the following elements of O&M instruction across a range of environments (such as indoor, residential, and light business):
4a. Concepts related to independent movement and orientation (such as body, laterality, directionality, spatial, environmental, and time-distance).
4b. Mobility techniques, including, but not limited to, basic skills, cane skills, adapted mobility devices, route travel, street crossings, and the use of public and other transportation systems.
4c. Orientation skills, including, but not limited to, use of cognitive processes; landmarks; cardinal directions; room, store, and community familiarization; address system; independent information gathering; route planning; and maps.
4d. Use of low vision in maintaining safe and independent movement and orientation (such as the use of non-optical devices, use of optical devices in conjunction with eye care professionals, use of visual skills, and incorporating vision use with cane or other mobility systems).
4e. Use of remaining senses (other than vision) in maintaining safe and independent movement and orientation (such as the use of auditory skills, reflected sound, tactile recognition, proprioceptive and kinesthetic awareness).
MONITORING AND SAFETY
5. Candidate is able to effectively monitor orientation and mobility skills, recognize potentially dangerous situations, and intervene as appropriate to ensure student safety.
FACILITATING INDEPENDENCE
6. Candidate is able to facilitate student independence and problem solving ability across a variety of travel situations, in familiar and unfamiliar environments.
PROFESSIONALISM
7. Candidate demonstrates professional conduct consistent with the Code of Ethics for Orientation & Mobility Specialists, finds and accesses appropriate resources, keeps on-time scheduling, and follows and maintains appropriate record keeping and reporting procedures.

APPENDIX E

CREATION OF THE O&M CLINICAL COMPETENCY EVALUATION MATRIX

Table 20: Competency Skills for Domain 1: Communication and Professional Relationships

Competency Skills	Competency Statements from Previous Research		
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**
Skill 1: Establishing Rapport	-Create an atmosphere that encourages students to discuss personal problems related to their mobility	-Establishment of an appropriate rapport with students	-Establishing rapport with clients
Skill 2: Communicating with Students/Clients	-Orally communicate with students at their level of verbal communication	-Communication activities	-Interacting proficiently with consumers
Skill 3: Communicating with Team Members	-Communicate information about students' mobility that can be understood by other mobility specialists, students' families, and other professionals	-Communication activities -Communicate a learner's O&M program, including goals and objectives, to significant others	-Developing and maintaining professional relationships -Conferring with other members of the professional team

Table 20 (continued)

Skill 4: Communicating with Supervisors	-Communicate information about students' mobility that can be understood by other mobility specialists, students' families, and other professionals	-Communication activities	-Developing and maintaining professional relationships -Conferring with other members of the professional team
Skill 5: Communicating with Families	-Communicate information about students' mobility that can be understood by other mobility specialists, students' families, and other professionals	-Communication activities -Assisting family members and significant others in understanding the impact of the student's disability or disabilities -Communicate a learner's O&M program, including goals and objectives, to significant others	-Communicating with parents and families

Table 21: Competency Skills for Domain 2: O&M Assessment

Competency Skills	Competency Statements from Previous Research			
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**	**Zebehazy, et al, 2005**
Skill 6: Planning O&M Assessments	-Design informal assessment procedures that will reveal students' abilities and inabilities	- Choose formal and informal concept development assessment procedures to assess skills -Analyze, interpret, and utilize assessment reports from relevant professional fields -Identifying appropriate O&M assessments		-Assess client's level of abilities
Skill 7: Conducting O&M Assessments		-Use observation techniques when assessing students -Use appropriate procedures for the assessment of O&M skills and techniques and residual vision -Administering appropriate O&M assessments	-Assessing clients' travel needs, current skills, and goals -Conducting ongoing assessments	-Assess clients' level of abilities
Skill 8: Synthesizing Findings in a Written Report	-Make accurate predictions as to the extent to which students will achieve their mobility goals		-Preparing written reports	
Skill 9: Communicating Results	-Orally communicate with students at their level of verbal communication -Communicate information about students' mobility that can be understood by other mobility specialists, students' families, and other professionals	-Communicate a learner's O&M program, including goals and objectives, to significant others	-Interacting proficiently with consumers	

Table 22: Competency Skills for Domain 3: Instructional Planning

Competency Skill on O&M CCEM	Competency Statements from Previous Research			
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**	**Zebehazy, et al, 2005**
Skill 10: Reviewing and Interpreting Relevant Records	- Accurately identify students' abilities and inabilities from formal instruments or reports	-Analyze, interpret, and utilize assessment reports from relevant professional fields		
Skill 11: Previewing and Selecting Potential Training Areas	-Selecting training environments that are compatible with students' mobility goals	-Analyze and select various instructional environments for introducing, developing, and reinforcing O&M skills	-Analysis and selection of environments for teaching O&M skills -Assessing environments for travel demands	
Skill 12: Considering Instructional Materials and Appropriate Devices	-Select instructional materials that are compatible with students' learning styles, intelligence, ages, and mobility goals	-Developing and using media and materials relevant to O&M instruction	-Prescription of cane and assistive mobility devices	
Skill 13: Knowing Options for Mobility Systems	-Provide experiences that help students learn the advantages and disadvantages of all mobility devices	-Providing students with information regarding all the mobility system options and their advantages and disadvantages		

Table 22 (continued)

Skill 14: Choosing Appropriate Goals	-Establish mobility goals that are compatible with students' learning styles, intelligences, ages, maturity, physical limitation, medical limitations, sensory limitations, and mobility aptitude	-Develop appropriate goals for O&M program	-Developing instructional goals and objectives	-Determine the vital needs of clients for safety and independence
Skill 15: Writing Appropriate Behavioral Objectives	-Write behaviorally stated objectives	-Develop appropriate objectives for O&M program	- Developing instructional goals and objectives	
Skill 16: Developing Individualized Lessons	-Design instructional sequences that are compatible with students' students' learning styles, intelligence, ages, maturity, physical limitation, medical limitations, sensory limitations, and mobility aptitude	-Adapting and individualizing O&M lessons -Develop a plan that attends to personnel equipment, materials, and training needs -Adapting O&M instruction due to the presence of additional handicaps, and medical and sensory problems		-Plan individualized instruction
Skill 17: Sequencing of Lessons	-Design instructional sequences that are compatible with students' students' learning styles, intelligence, ages, maturity, physical limitation, medical limitations, sensory limitations, and mobility aptitude	-Teaching O&M skills in an appropriate sequence		

Table 23: Competency Skills for Domain 4: Instruction

Competency Skill on O&M CCEM	Competency Statements from Previous Research			
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**	**Zebehazy, et al, 2005**
Skill 18: Introducing Lessons	-Communicate non-verbally with students in non-verbal modes they comprehend -Orally communicate with students at their level of verbal communication	-Using appropriate communication systems	-Interacting proficiently with consumers	
Skill 19: Teaching Use of Low Vision and Other Senses	-Provide experiences that help students learn the optimal use of vision and low vision aids, hearing, touch, kinesthesis, olfaction, and gestation	-Instruction in use of optical and non-optical aids -Developing and implementing instructional strategies for improving visual functioning	-Emphasizing the use of vision and effective use of auditory, tactile, and other sensory modes	
Skill 20: Teaching Human Guide	-Provide experiences that help students learn safe skills for using sighted guides	-Instruction in the use of precane skills (i.e. sighted guide and protective techniques	-Human guide techniques	
Skill 21: Teaching Indoor Mobility Techniques and Skill 22: Teaching Outdoor Mobility Techniques	-Provide experiences that help students learn safe skills for using canes	-Instruction in the use of cane skills	-Instruction in the use of cane skills	

Table 23 (continued)

Skill 23: Teaching Indoor Orientation Skills and Skill 24: Teaching Outdoor Orientation Skills	-Provide experiences that help students learn to identify their body parts, coordinated body movements, synchronized body movements, directional concepts -Provide experiences that help students learn safe skills for maintaining orientation -Provide experiences that help students learn safe skills using electronic devices -Provide experiences that help the students learn to identify environmental objects and the spatial relation between those objects	-Instruction in the use of orientation skills	-Orientation and travel skills including route planning and use of compass directions -Teaching alignment by sounds and lines of reference proficiently
Skill 25: Managing Lessons	-Make accurate judgments from observations about students' anxiety level and confidence -Determine when instructional plans should change to benefit students		
Skill 26: Using Instructional Strategies	-Design instructional strategies that are compatible with the students' learning styles, intelligence, ages, maturity, physical limitations, medical limitations, sensory limitations, and mobility aptitude	-Applying theories of learning to O&M instruction	

Table 23 (continued)

Skill 27: Gauging Acquisition of Skills	-Make accurate judgments from observations about students' progress	-Observation techniques for O&M instruction -Making observations and evaluations of clients' progress	-Monitor clients' acquisition and development of skills
Skill 28: Providing Feedback to Students/Clients	-Make accurate judgments from observations about students' need for feedback	-Providing timely, accurate, and effective feedback proficiently	
Skill 29: Reflecting on Teaching	-Evaluation procedures		

Table 24: Competency Skills for Domain 5: Monitoring and Safety

Competency Skill on O&M CCEM	**Competency Statements from Previous Research**		
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**
Skill 30: Monitoring O&M Skills	-Make accurate judgments from observations about students' need for close monitoring		-Observation techniques for O&M instruction -Monitoring from a close, intermediate, or distant position
Skill 31: Recognizing Potentially Dangerous Situations	-Make accurate judgments from observations about students' safety		
Skill 32: Intervening	-Make accurate judgments from observations about students' anxiety level, confidence, need for feedback		

Table 25: Competency Skills for Domain 6: Facilitating Independence

Competency Skill on O&M CCEM	Competency Statements from Previous Research		
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**
Skill 33: Fostering High Expectations	-Design procedures that reveal students' rate of progress with them		
Skill 34: Facilitating Self-Advocacy Skills	-Create situations that encourage positive attitudes toward the visually handicapped within students, students' families, and the community at large	-Opportunities for the development of social skills in the context of O&M instruction -Society's attitudes toward blindness and visual impairment	
Skill 35: Facilitating Problem Solving Skills	-Provide experiences that help the students determine when traffic conditions pose threats to pedestrians terrain conditions are unsafe for pedestrian use		-Provide instruction and experience in independent travel
Skill 36: Facilitating Decision Making Skills	-Provide experiences that help the students learn to apply their skills under ideal and adverse weather conditions		

Table 26: Competency Skills for Domain 7: Professionalism

Competency Skill on O&M CCEM	Competency Statements from Previous Research		
	Kimbrough, 1980	**Uslan et al., 1989**	**Weiner & Siffermann, 2000**
Skill 37: Maintaining Professional Conduct			-Developing and maintaining professional relationships
Skill 38: Utilizing Resources		-Sources in the current literature pertaining to O&M	
Skill 39: Scheduling	-Accurately match lesson time blocks with the abilities and limitations of students		
Skill 40: Record Keeping and Reporting	-Accurately document his/her time spent in conducting student assessments and writing reports, planning lessons, and evaluating teaching environments	-Develop a schedule for submitting written reports -Appropriate record keeping system in O&M -Preparation and record-keeping activities	-Preparing written reports -Maintaining appropriate records

APPENDIX F

INVITATION TO PARTICIPATE: O&M UNIVERSITY FACULTY

Dear O&M University Faculty:

My name is Rebecca Renshaw and I am an NCLVI Fellow (ABD) at the University of Pittsburgh (Pitt). My dissertation topic, which has been approved by my dissertation doctoral committee (Dr. George J. Zimmerman is my research and doctoral advisor) as well as the Institutional Review Board at Pitt, is to develop a valid and reliable instrument which will ultimately be used to evaluate the clinical competencies of pre-service O&M specialists. I am asking for your assistance to make this happen.

I am looking for university faculty in O&M to **complete a survey** and provide feedback on the content of the clinical evaluation instrument I am proposing to validate. The survey should ONLY be completed by O&M university program coordinators or any other full or part-time O&M faculty hired by the university to supervise O&M students during their internships. If you are interested in completing the survey, please reply to this email and a link to the online survey will be sent to you.

Your participation is important to assist in developing a valid and reliable instrument to evaluate the clinical competencies of pre-service O&M specialists. Of course, participation is voluntary and you can withdraw at any time. Should you decide to participate, you will be asked to complete the online survey **by Monday November 2, 2009**. Upon completion of the survey, you will be entered into a drawing for $200.

Based on the results of the survey, revisions will be made to the evaluation instrument as necessary. The second phase of my dissertation will consist of piloting the instrument with O&M interns. Before that can happen though, I need your feedback on the content of the instrument. I hope you will consider completing the survey.

Thank you.

Rebecca L. Renshaw
NCLVI Doctoral Fellow
University of Pittsburgh

APPENDIX G

ITEM REVIEW SURVEY

INTRODUCTION

Welcome to the O&M Clinical Competency Evaluation Matrix (CCEM) Survey. Thank you for your participation! This survey is a part of a dissertation research project at the University of Pittsburgh. The project has Institutional Review Board approval.

This survey should ONLY be completed by O&M university program coordinators or any other full or part-time O&M faculty hired by the university to supervise O&M students during their internships. The intent of this survey is to gather information about the content of a proposed clinical competency evaluation tool. Your participation is important to assist in developing a valid and reliable approach to evaluating clinical competencies of O&M interns.

The survey consists of a short demographics section followed by an item review of EACH of the competency skills within the seven domains of the O&M CCEM. The questions may seem redundant but it is important that you focus only on the skill under question when responding.

The survey should take about 45 minutes to complete. Although you will be asked at the completion of the survey to provide your name and address in order to be entered into a drawing for $200, your responses to the survey questions will not be linked to your name or other personally identifiable information. Your participation is voluntary and you can discontinue the survey at any point. If you are unable to complete the survey in one sitting, your responses will be saved and you can complete the survey at a later point. Please contact me at [EMAIL ADDRESS] if you are unable to access the survey or have any questions regarding the study.

DEMOGRAPHICS FOR O&M UNIVERSITY PREPARATION FACULTY

1. How many years have you worked in the field of O&M?

- ☐ Less than a year
- ☐ 1-5 years
- ☐ 5-10 years
- ☐ More than 10 years
- ☐ Other (please specify)

2. How many years have you worked in an O&M university preparation program setting?

- ☐ Less than a year
- ☐ 1-5 years
- ☐ 5-10 years
- ☐ More than 10 years

3. While at an O&M university preparation program setting, how many O&M interns have you supervised, including currently?

- ☐ None
- ☐ 1 student
- ☐ 2-5 students
- ☐ More than 5 students

ACVREP CLINICAL COMPETENCY FORM

The current standards for evaluating clinical competency of O&M interns are provided by ACVREP. How much do you agree with the following statements describing the current ACVREP clinical competency evaluation form?

4a. The current ACVREP clinical competency form provides a *clear description* of the clinical competency skills.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

4b. The current ACVREP clinical competency form includes *all* the clinical competencies necessary to receive certification.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

4c. The current ACVREP clinical competency form allows *objective* measurement of the O&M intern's clinical competencies.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

EVALUATION OF THE O&M CCEM

This next series of questions will pertain to the competency skills under each of the seven ACVREP clinical competency domains listed on the O&M CCEM. Each page of the survey will focus on only ONE competency skill. The same questions are repeated for each skill. Although the questions may seem tedious at times, it is important that you focus only on the skill listed at the top of the page for each series of questions. Your feedback is extremely valuable and your time is appreciated**.**

DOMAIN 1: The **Communication and Professional Relationships Domain** contains 5 competency skills:

Skill 1 - Establishing Rapport

Skill 2 - Communicating with Clients

Skill 3 - Communicating with Families

Skill 4 - Communicating with Colleagues

Skill 5 - Communicating with Supervisors

The next 5 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 1 - Establishing Rapport

5. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

Skill 1 - Establishing Rapport

6. Is this competency skill representative of the competency domain COMMUNICATION AND PROFESSIONAL RELATIONSHIPS?

- ☐ Yes
- ☐ No

If no, why?

Skill 1 - Establishing Rapport

7. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 1 - Establishing Rapport - Performance Levels:

***Level 1*:** Intern is unable to relate to clients, families, and professionals and does not show thoughtfulness, patience, understanding or empathy.

***Level 2*:** Intern attempts to relate to some clients, families, and professionals by showing thoughtfulness, patience, understanding, and empathy.

***Level 3*:** Intern consistently attempts to relate to all clients, families, and professionals by showing thoughtfulness, patience, understanding, and empathy.

***Level 4*:** Intern always demonstrates an ability to comfortably relate to all clients, families, and professionals by showing thoughtfulness, patience, understanding, and empathy.

8. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

9. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

10. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

11. At the completion of an O&M internship, what level of performance in the competency skill of ESTABLISHING RAPPORT do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 2 - Communicating with Clients

12. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 2 - Communicating with Clients

13. Is this competency skill representative of the competency domain COMMUNICATION AND PROFESSIONAL RELATIONSHIPS?

- ☐ Yes
- ☐ No

If no, why?

Skill 2 - Communicating with Clients

14. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 2 - Communicating with Clients - Performance Levels:

***Level 1*:** Intern's interactions with clients are negative, demeaning, or inappropriate based on the ages, abilities, or cultural backgrounds of the clients.

***Level 2*:** Intern's interactions with clients are generally friendly and personable but may reflect inconsistencies, favoritism, or disregard for clients' ages, abilities, or cultural backgrounds.

***Level 3*:** Intern's interactions are friendly and demonstrate general warmth, caring, and respect. Intern consistently attempts to consider the clients' ages, abilities and cultural backgrounds.

***Level 4*:** Intern always demonstrates genuine caring and respect for all clients while maintaining appropriate interactions based on clients' ages, abilities, and cultural backgrounds.

15. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

16. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

17. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

18. At the completion of an O&M internship, what level of performance in the competency skill of COMMUNICATING WITH CLIENTS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 3 - Communicating with Families

19. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 3 - Communicating with Families

20. Is this competency skill representative of the competency domain COMMUNICATION AND PROFESSIONAL RELATIONSHIPS?

- [ ] Yes
- [ ] No

If no, why?

Skill 3 - Communicating with Families

21. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 3 - Communicating with Families - Performance Levels:

***Level 1*:** Intern rarely communicates with families and/or does not respond or responds insensitively to families' concerns.

***Level 2*:** Intern communicates with families when requested. Responses to families' concerns are minimal but usually show a basic level of sensitivity.

***Level 3*:** Intern initiates communication with families. Responses to concerns are somewhat thorough and consistently show a basic level of sensitivity.

***Level 4*:** Intern communicates frequently to families and goes above and beyond to provide additional information. Responses to families' concerns are always thorough and handled with great sensitivity.

22. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

23. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

24. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

25. At the completion of an O&M internship, what level of performance in the competency skill of COMMUNICATING WITH FAMILIES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 4 - Communicating with Colleagues

26. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 4 - Communicating with Colleagues

27. Is this competency skill representative of the competency domain COMMUNICATION AND PROFESSIONAL RELATIONSHIPS?

- ☐ Yes
- ☐ No

If no, why?

Skill 4 - Communicating with Colleagues

28. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 4 - Communicating with Colleagues - Performance Levels:

***Level 1*:** Intern's relationships with colleagues are negative or self-serving.

***Level 2*:** Intern maintains cordial relationships with colleagues to fulfill the duties that the school/agency requires.

***Level 3*:** Support, cooperation, and collaboration characterize the intern's relationships with colleagues.

***Level 4*:** Support, cooperation, and collaboration characterize the intern's relationships with colleagues and intern takes initiative in assuming a leadership role.

29. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

30. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

31. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

32. At the completion of an O&M internship, what level of performance in the competency skill of COMMUNICATING WITH COLLEAGUES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 5 - Communicating with Supervisors

33. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 5 - Communicating with Supervisors

34. Is this competency skill representative of the competency domain COMMUNICATION AND PROFESSIONAL RELATIONSHIPS?

- ☐ Yes
- ☐ No

If no, why?

Skill 5 - Communicating with Supervisors

35. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 5 - Communicating with Supervisors - Performance Levels:

***Level 1*:** Intern demonstrates no respect for authority and/or does not initiate interactions with the supervisor in order to seek advice.

***Level 2*:** Intern shows a basic level of respect for authority and/or occasionally initiates interactions with the supervisor. Intern's contributions in those interactions are minimal.

***Level 3*:** Intern is respectful of authority and consistently initiates interactions with supervisor. Intern occasionally contributes to the interactions by asking basic, appropriate questions.

***Level 4*:** Intern is always respectful of authority and frequently initiates interactions with supervisor. Intern fully contributes to the interactions and asks detailed questions.

36. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

37. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

38. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

39. At the completion of an O&M internship, what level of performance in the competency skill of COMMUNICATING WITH SUPERVISORS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

The questions you just completed were regarding the Communication and Professional Relationships Domain and the following 5 competency skills:

Skill 1 - Establishing Rapport

Skill 2 - Communicating with Clients

Skill 3 - Communicating with Families

Skill 4 - Communicating with Colleagues

Skill 5 - Communicating with Supervisors

40. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- ☐ Yes
- ☐ No

If yes, what skills should be added?

DOMAIN 2: The **O&M Assessment Domain** contains 4 competency skills:

Skill 6 - Planning O&M Assessments

Skill 7 - Conducting O&M Assessments

Skill 8 - Synthesizing Findings in a Report

Skill 9 - Communicating Results

The next 4 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 6 - Planning O&M Assessments

41. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 6 - Planning O&M Assessments

42. Is this competency skill representative of the competency domain O&M ASSESSMENT?

- ☐ Yes
- ☐ No

If no, why?

Skill 6 - Planning O&M Assessments

43. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 6 - Planning O&M Assessments - Performance Levels:

***Level 1*:** Intern is unaware of the following components for planning O&M assessments: conducting interviews, reviewing records, selecting assessment tools and environments, and planning appropriate activities.

***Level 2*:** Intern is aware of some of the basic components for planning O&M assessments but demonstrates little attempt to plan appropriate detail and activities within those components.

***Level 3*:** Intern is aware of all of the components for planning O&M assessments and demonstrates an attempt to plan appropriate detail and activities within some of those components.

***Level 4*:** Intern has an in-depth knowledge of all the components for planning O&M assessments and comprehensively plans details and activities within all the components.

44. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

45. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

46. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

47. At the completion of an O&M internship, what level of performance in the competency skill of PLANNING O&M ASSESSMENTS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 7 - Conducting O&M Assessments

48. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 7 - Conducting O&M Assessments

49. Is this competency skill representative of the competency domain O&M ASSESSMENT?

- ☐ Yes
- ☐ No

If no, why?

Skill 7 - Conducting O&M Assessments

50. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 7 - Conducting O&M Assessments - Performance Levels:

***Level 1*:** Intern is unable to make relevant observations and does not ask questions to gather additional information from the client during the assessment.

***Level 2*:** Intern inconsistently makes relevant observations and occasionally asks appropriate questions. The assessment is executed in an apparent random, segmented format.

***Level 3*:** Intern consistently makes relevant observations and gathers information using general questions. Assessment is conducted with some fluidity across components.

***Level 4*:** Intern executes all components of the O&M assessment seamlessly while making keen observations and asking specific questions to gather additional information.

51. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

52. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

53. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

54. At the completion of an O&M internship, what level of performance in the competency skill of CONDUCTING O&M ASSESSMENTS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 8 - Synthesizing Findings in a Report

55. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 8 - Synthesizing Findings in a Report

56. Is this competency skill representative of the competency domain O&M ASSESSMENT?

- ☐ Yes
- ☐ No

If no, why?

Skill 8 - Synthesizing Findings in a Report

57. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 8 - Synthesizing Findings in a Report - Performance Levels:

***Level 1*:** Intern is not able to generate reports that coherently and accurately explain the assessment results.

***Level 2*:** Intern is inconsistently able to generate reports that coherently and accurately explain the assessment results and makes general O&M recommendations that are not necessarily linked to the assessment results.

***Level 3*:** Intern is consistently able to generate reports that coherently and accurately explain the assessment results. Intern makes some O&M recommendations linked to assessment results.

***Level 4*:** Intern always generates reports that are coherent, accurate, and detailed. In addition, the intern is able to synthesize all of the results to formulate O&M recommendations related to all areas assessed.

58. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

59. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

60. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

61. At the completion of an O&M internship, what level of performance in the competency skill SYNTHESIZING FINDINGS IN A REPORT do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 9 - Communicating Results

62. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 9 - Communicating Results

63. Is this competency skill representative of the competency domain O&M ASSESSMENT?

- ☐ Yes
- ☐ No

If no, why?

Skill 9 - Communicating Results

64. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 9 - Communicating Results - Performance Levels:

***Level 1*:** Intern does not communicate results to the clients, families, and/or other team members.

***Level 2*:** Intern attempts to explain the assessment results to clients, families, and/or other team members, but explanation is incomplete, vague, or language used is inappropriate.

***Level 3*:** Intern consistently explains the assessment results to clients, families, and/or other team members but does not provide specific examples and suggestions to implement immediately.

***Level 4*:** Intern always clearly articulates the results to the clients, families, and/or other team members and connects the assessment results to the recommendations by providing specific examples and suggestions to implement immediately.

65. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

66. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

67. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

68. At the completion of an O&M internship, what level of performance in the competency skill COMMUNICATING RESULTS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

The questions you just completed were regarding the O&M Assessment Domain and the following 4 competency skills:

Skill 6 - Planning O&M Assessments

Skill 7 - Conducting O&M Assessments

Skill 8 - Synthesizing Findings in a Report

Skill 9 - Communicating Results

69. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- [ ] Yes
- [ ] No

If yes, what skills should be added?

DOMAIN 3: The **Instructional Planning Domain** contains 8 competency skills:

Skill 10 - Reviewing and Interpreting Relevant Records

Skill 11 - Previewing and Selecting Potential Training Areas

Skill 12 - Considering Instructional Materials and Appropriate Devices

Skill 13 - Knowing Options for Mobility Systems

Skill 14 - Choosing Appropriate Goals

Skill 15 - Writing Appropriate Behavioral Objectives

Skill 16 - Developing Individualized Lessons

Skill 17 - Sequencing of Lessons

The next 8 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 10 - Reviewing and Interpreting Relevant Records

70. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 10 - Reviewing and Interpreting Relevant Records

71. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 10 - Reviewing and Interpreting Relevant Records

72. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 10 - Reviewing and Interpreting Relevant Records – Performance Levels:

***Level 1*:** Intern does not review all relevant records and reports when planning O&M instruction or is unable to interpret the reports for use in instructional planning.

***Level 2*:** Intern reviews some relevant records and reports when planning instruction and inconsistently interprets information at a basic level to determine instructional areas.

***Level 3*:** Intern reviews all relevant records and reports and consistently interprets the information at a basic level to determine instructional areas and starting points for instruction within some of those areas.

***Level 4*:** Intern accurately synthesizes at a deeper level all relevant records and reports when determining instructional areas and starting points for instruction within all those areas.

73. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

74. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

75. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

76. At the completion of an O&M internship, what level of performance in the competency skill REVIEWING AND INTERPRETING RELEVANT RECORDS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 11 - Previewing and Selecting Potential Training Areas

77. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 11 - Previewing and Selecting Potential Training Areas

78. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 11 - Previewing and Selecting Potential Training Areas

79. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 11 - Previewing and Selecting Potential Training Areas- Performance Levels:

***Level 1*:** Intern does not preview potential training areas or is unable to select appropriate lesson locations based on the objectives of the lessons.

***Level 2*:** Intern previews potential training areas and inconsistently selects lesson locations based on the lesson objectives and the level of the client.

***Level 3*:** Intern is able to consistently select lesson locations that are based on the lesson objectives and sometimes demonstrates attention to client level.

***Level 4*:** Intern always selects lesson locations that allow for both meeting the lesson objective and attending to the level of the client.

80. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

81. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

82. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

83. At the completion of an O&M internship, what level of performance in the competency skill PREVIEWING AND SELECTING POTENTIAL TRAINING AREAS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 12 - Considering Instructional Materials and Appropriate Devices

84. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 12 - Considering Instructional Materials and Appropriate Devices

85. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 12 - Considering Instructional Materials and Appropriate Devices

86. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 12 - Considering Instructional Materials and Appropriate Devices - Performance Levels:

***Level 1*:** Intern does not consider materials to support instruction or chooses materials and devices that are inappropriate for the instructional goals.

***Level 2*:** Intern inconsistently recognizes the need for materials and devices to support instruction or inconsistently chooses appropriate materials and devices that support the instructional goals from resources that are available.

***Level 3*:** Intern consistently recognizes the need for materials and devices to support instruction and chooses appropriate materials and devices from resources that are available.

***Level 4*:** Intern always recognizes the needs for materials and devices to support instruction and uses creativity in customizing or procuring the materials and devices when available resources do not match the need.

87. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

88. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

89. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

90. At the completion of an O&M internship, what level of performance in the competency skill of CONSIDERING INSTRUCTIONAL MATERIALS AND APPROPRIATE DEVICES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 13 - Knowing Options for Mobility Systems

91. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 13 - Knowing Options for Mobility Systems

92. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 13 - Knowing Options for Mobility Systems

93. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 13 - Knowing Options for Mobility Systems - Performance Levels:

***Level 1*:** Intern is unaware of the range of mobility system options available (human guide, long cane and the various types, dog guide, and electronic travel aids) or does not provide recommendations to clients/families.

***Level 2*:** Intern is aware of the range of mobility system options but sometimes articulates inaccurate information or provides an inappropriate recommendation to clients/families.

***Level 3*:** Intern is fully aware of mobility system options and articulates accurate information when providing an appropriate recommendation to clients/families.

***Level 4*:** Intern displays extensive knowledge of mobility systems and is adept at understanding clients/families perspectives and in engaging clients/families in making an informed and appropriate decision for themselves.

94. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

95. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

96. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

97. At the completion of an O&M internship, what level of performance in the competency skill of KNOWING OPTIONS FOR MOBILITY SYSTEMS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 14 - Choosing Appropriate Goals

98. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 14 - Choosing Appropriate Goals

99. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 14 - Choosing Appropriate Goals

100. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 14 - Choosing Appropriate Goals - Performance Levels:

***Level 1*:** Intern chooses lesson goals that are not valuable or appropriate for clients.

***Level 2*:** Intern inconsistently chooses lesson goals that are valuable in either their expectations or appropriateness to the clients' needs.

***Level 3*:** Intern consistently chooses lesson goals that are valuable in their level of expectations and appropriateness to the clients' needs.

***Level 4*:** Intern always chooses goals that are valuable and appropriate to the client's needs and also explicitly engages clients/families in the goal making process.

101. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

102. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

103. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

104. At the completion of an O&M internship, what level of performance in the competency skill of CHOOSING APPROPRIATE GOALS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 15 - Writing Appropriate Behavioral Objectives

105. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 15 - Writing Appropriate Behavioral Objectives

106. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 15 - Writing Appropriate Behavioral Objectives

107. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 15 - Writing Appropriate Behavioral Objectives - Performance Levels:

***Level 1*:** Intern does not write behavioral objectives that are clear or that relate to the goal of the lessons.

***Level 2*:** Intern inconsistently writes general behavioral objectives that relate to the goal of the lessons but objectives either lack detail regarding the specific components needed to achieve the goal or objectives are not measureable.

***Level 3*:** Intern consistently writes behavioral objectives that are clear and reflect the breakdown of specific components needed to achieve the goal but some objectives are not measureable.

***Level 4*:** Intern always writes behavioral objectives that are clear, reflect the breakdown of the specific components, and are measureable.

108. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

109. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

110. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

111. At the completion of an O&M internship, what level of performance in the competency skill of WRITING APPROPRIATE BEHAVIORAL OBJECTIVES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 16 - Developing Individualized Lessons

112. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 16 - Developing Individualized Lessons

113. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 16 - Developing Individualized Lessons

114. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 16 - Developing Individualized Lessons - Performance Levels:

***Level 1*:** Intern is unable to design lessons that are suitable to the lesson objectives or the clients' abilities, needs, and learning styles.

***Level 2*:** Intern inconsistently designs lessons that are suitable to lesson objectives or the clients' abilities, needs, and learning styles.

***Level 3*:** Intern consistently designs lessons that are suitable to the lesson objectives but some of the lessons are not tailored to the clients' abilities, needs, and learning styles.

***Level 4*:** Intern always designs lessons that are suitable to the lesson objectives and tailored to meet the individual abilities, needs, and learning styles of all clients.

115. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

116. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

117. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

118. At the completion of an O&M internship, what level of performance in the competency skill of DEVELOPING INDIVIDUALIZED LESSONS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 17 - Sequencing of Lessons

119. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 17 - Sequencing of Lessons

120. Is this competency skill representative of the competency domain INSTRUCTIONAL PLANNING?

- ☐ Yes
- ☐ No

If no, why?

Skill 17 - Sequencing of Lessons

121. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 17 - Sequencing of Lessons - Performance Levels:

***Level 1*:** Intern does not understand prerequisite knowledge important for learning skills and concepts when planning instruction. Progression of lessons is not sequential.

***Level 2*:** Intern inconsistently incorporates prerequisite knowledge important for learning skills and concepts when planning instruction. Progression of lessons is not always sequential.

***Level 3*:** Intern consistently plans lessons that reflect understanding of prerequisite relationships among the skills and concepts. Lessons are sequential based on traditional O&M progression but not based on the clients' needs or past performance.

***Level 4*:** Intern actively builds on knowledge of prerequisite relationships among the skills and concepts when designing lessons and demonstrates attention to the clients' needs and past performance when sequencing lessons.

122. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

123. How much do you agree with the wording of these performance levels?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

124. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

125. At the completion of an O&M internship, what level of performance in the competency skill of SEQUENCING OF LESSONS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

The questions you just completed were regarding the Instructional Planning Domain and the following 8 competency skills:

Skill 10 - Reviewing and Interpreting Relevant Records

Skill 11 - Previewing and Selecting Potential Training Areas

Skill 12 - Considering Instructional Materials and Appropriate Devices

Skill 13 - Knowing Options for Mobility Systems

Skill 14 - Choosing Appropriate Goals

Skill 15 - Writing Appropriate Behavioral Objectives

Skill 16 - Developing Individualized Lessons

Skill 17 - Sequencing of Lessons

126. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- ☐ Yes
- ☐ No

If yes, what skills should be added?

DOMAIN 4: The **Instruction Domain** contains 12 competency skills:

Skill 18 - Introducing Lessons

Skill 19 - Teaching Use of Low Vision and Other Senses

Skill 20 - Teaching Human Guide Techniques

Skill 21 - Teaching Indoor Mobility Techniques

Skill 22 - Teaching Outdoor Mobility Techniques

Skill 23 - Teaching Indoor Orientation Skills

Skill 24 - Teaching Outdoor Orientation Skills

Skill 25 - Managing the Lessons

Skill 26 - Using Instructional Strategies

Skill 27 - Gauging Acquisition of Skills

Skill 28 - Providing Feedback to Clients

Skill 29 - Reflecting on Teaching

The next 12 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 18 - Introducing Lessons

127. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 18 - Introducing Lessons

128. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 18 - Introducing Lessons

129. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 18 - Introducing Lessons - Performance Levels:

***Level 1*:** Intern's directions and instructions for lessons are confusing to clients.

***Level 2*:** Intern's directions and instructions are clarified after initial client confusion or are excessively detailed.

***Level 3*:** Intern's directions and instructions are clear to clients and contain an appropriate level of detail but do not connect prior learning to current lesson.

***Level 4*:** Intern's directions and instructions are clear to clients, concise and the goals of the lessons are connected to prior learning.

130. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

131. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

132. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

133. At the completion of an O&M internship, what level of performance in the competency skill of INTRODUCING LESSONS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 19 - Teaching Use of Low Vision and Other Senses

134. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 19 - Teaching Use of Low Vision and Other Senses

135. Is this competency skill representative of the competency domain INSTRUCTION?

- [ ] Yes
- [ ] No

If no, why?

Skill 19 - Teaching Use of Low Vision and Other Senses

136. How essential is this skill in demonstrating clinical competency in O&M?

- [ ] Not essential
- [ ] Somewhat essential
- [ ] Essential
- [ ] Absolutely essential

Skill 19 - Teaching Use of Low Vision and Other Senses – Performance Levels:

***Level 1*:** Intern does not teach clients how to use residual vision and other senses or makes significant content errors when teaching such skills.

***Level 2*:** Intern is inconsistently accurate when teaching clients to use residual vision and other senses.

***Level 3*:** Intern is consistently accurate when teaching clients to use residual vision and other senses but is unable to explain the rationale behind the skills.

***Level 4*:** Intern is always accurate when teaching clients to use residual vision and other senses and articulates the rationale behind the skills.

137. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

138. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

139. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

140. At the completion of an O&M internship, what level of performance in the competency skill of TEACHING USE OF LOW VISION AND OTHER SENSES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 20 - Teaching Human Guide Techniques

141. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 20 - Teaching Human Guide Techniques

142. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 20 - Teaching Human Guide Techniques

143. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 20 - Teaching Human Guide Techniques - Performance Levels:

***Level 1*:** Intern makes significant content errors when teaching human guide techniques.

***Level 2*:** Intern is inconsistently accurate when teaching the content of human guide techniques.

***Level 3*:** Intern is consistently accurate when teaching the content of human guide techniques but is unable to explain the rationale behind the techniques.

***Level 4*:** Intern is always accurate when teaching the content of human guide techniques and articulates the rationale behind the techniques.

144. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

145. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

146. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

147. At the completion of an O&M internship, what level of performance in the competency skill of TEACHING HUMAN GUIDE TECHNIQUES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 21 - Teaching Indoor Mobility Techniques

148. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 21 - Teaching Indoor Mobility Techniques

149. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 21 - Teaching Indoor Mobility Techniques

150. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 21 - Teaching Indoor Mobility Techniques - Performance Levels:

***Level 1*:** Intern makes significant content errors when teaching indoor mobility techniques.

***Level 2*:** Intern is inconsistently accurate when teaching the content of indoor mobility techniques.

***Level 3*:** Intern is consistently accurate when teaching the content of indoor mobility techniques but is unable to explain the rationale behind the techniques.

***Level 4*:** Intern is always accurate when teaching the content of indoor mobility techniques and articulates the rationale behind the techniques.

151. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

152. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

153. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

154. At the completion of an O&M internship, what level of performance in the competency skill of TEACHING INDOOR MOBILITY TECHNIQUES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 22 - Teaching Outdoor Mobility Techniques

155. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 22 - Teaching Outdoor Mobility Techniques

156. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 22 - Teaching Outdoor Mobility Techniques

157. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 22 - Teaching Outdoor Mobility Techniques - Performance Levels:

***Level 1*:** Intern makes significant content errors when teaching outdoor mobility techniques.

***Level 2*:** Intern is inconsistently accurate when teaching the content of outdoor mobility techniques.

***Level 3*:** Intern is consistently accurate when teaching the content of outdoor mobility techniques but is unable to explain the rationale behind the techniques.

***Level 4*:** Intern is always accurate when teaching the content of outdoor mobility techniques and articulates the rationale behind the techniques.

158. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

159. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

160. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

161. At the completion of an O&M internship, what level of performance in the competency skill of TEACHING OUTDOOR MOBILITY TECHNIQUES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 23 - Teaching Indoor Orientation Skills

162. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 23 - Teaching Indoor Orientation Skills

163. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 23 - Teaching Indoor Orientation Skills

164. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 23 - Teaching Indoor Orientation Skills - Performance Levels:

***Level 1*:** Intern makes significant content errors when teaching indoor orientation skills.

***Level 2*:** Intern is inconsistently accurate when teaching the content of indoor orientation skills.

***Level 3*:** Intern is consistently accurate when teaching the content of indoor orientation skills but is unable to explain the rationale behind the techniques.

***Level 4*:** Intern is always accurate when teaching the content of indoor orientation skills and articulates the rationale behind the techniques.

165. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

166. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

167. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

168. At the completion of an O&M internship, what level of performance in the competency skill of TEACHING INDOOR ORIENTATION SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 24 - Teaching Outdoor Orientation Skills

169. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 24 - Teaching Outdoor Orientation Skills

170. Is this competency skill representative of the competency domain INSTRUCTION?

- [ ] Yes
- [ ] No

If no, why?

Skill 24 - Teaching Outdoor Orientation Skills

171. How essential is this skill in demonstrating clinical competency in O&M?

- [ ] Not essential
- [ ] Somewhat essential
- [ ] Essential
- [ ] Absolutely essential

Skill 24 - Teaching Outdoor Orientation Skills - Performance Levels:

***Level 1*:** Intern makes significant content errors when teaching outdoor orientation skills.

***Level 2*:** Intern is inconsistently accurate when teaching the content of outdoor orientation skills.

***Level 3*:** Intern is consistently accurate when teaching the content of outdoor orientation skills but is unable to explain the rationale behind the techniques.

***Level 4*:** Intern is always accurate when teaching the content of outdoor orientation skills and articulates the rationale behind the techniques.

172. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

173. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

174. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

175. At the completion of an O&M internship, what level of performance in the competency skill of TEACHING OUTDOOR ORIENTATION SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 25 - Managing the Lessons

176. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 25 - Managing the Lessons

177. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 25 - Managing the Lessons

178. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 25 - Managing the Lessons - Performance Levels:

***Level 1*:** Intern does not maintain control of the lessons or keep the clients focused on the objectives.

***Level 2*:** Intern inconsistently keeps the clients focused on the objectives or the pacing of the lessons is too slow or hurried.

***Level 3*:** Intern consistently keeps the clients focused on the objectives and paces some of the lessons appropriately based on the individual needs of the clients.

***Level 4*:** Intern displays extensive skill in keeping all clients focused on the objectives and pacing the lessons appropriately based on the individual needs of the clients.

179. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- [ ] Yes
- [ ] No

If no, why?

180. How much do you agree with the wording of these performance levels?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

181. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

182. At the completion of an O&M internship, what level of performance in the competency skill of MANAGING THE LESSONS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 26 - Using Instructional Strategies

183. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 26 - Using Instructional Strategies

184. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 26 - Using Instructional Strategies

185. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 26 - Using Instructional Strategies - Performance Levels:

***Level 1*:** Intern adheres rigidly to the lesson plan, even when a change will clearly improve a lesson or does not know an instructional strategy to use to adjust the lesson.

***Level 2*:** Intern inconsistently attempts to adjust the lessons and/or is flustered or unsuccessful in adjusting the lessons or has a limited repertoire of strategies to use.

***Level 3*:** Intern consistently attempts to adjust lessons and most of the time is successful in adjusting the lessons using a moderate repertoire of strategies.

***Level 4*:** Intern always adjusts lessons when appropriate and does so easily and with success using an extensive repertoire of instructional strategies.

186. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

187. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

188. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

189. At the completion of an O&M internship, what level of performance in the competency skill of USING INSTRUCTIONAL STRATEGIES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 27 - Gauging Acquisition of Skills

190. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 27 - Gauging Acquisition of Skills

191. Is this competency skill representative of the competency domain INSTRUCTION?

- [ ] Yes
- [ ] No

If no, why?

Skill 27 - Gauging Acquisition of Skills

192. How essential is this skill in demonstrating clinical competency in O&M?

- [ ] Not essential
- [ ] Somewhat essential
- [ ] Essential
- [ ] Absolutely essential

Skill 27 - Gauging Acquisition of Skills - Performance Levels:

***Level 1*:** Intern does not recognize content errors clients make when executing orientation and mobility techniques and therefore is inaccurate in judging the success of the lesson.

***Level 2*:** Intern inconsistently recognizes errors clients make when executing orientation and mobility techniques.

***Level 3*:** Intern consistently recognizes errors in execution but is unable to determine if the clients have mastered the skill.

***Level 4*:** Intern always recognizes errors in execution and accurately determines whether the clients have mastered the skill.

193. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

194. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

195. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

196. At the completion of an O&M internship, what level of performance in the competency skill of GAUGING ACQUISITION OF SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 28 - Providing Feedback to Clients

197. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 28 - Providing Feedback to Clients

198. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 28 - Providing Feedback to Clients

199. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 28 - Providing Feedback to Clients - Performance Levels:

***Level 1*:** Intern does not provide feedback to clients or the feedback is inaccurate.

***Level 2*:** Intern inconsistently provides feedback that is accurate but it is vague or untimely.

***Level 3*:** Intern consistently provides accurate feedback that is usually timely and somewhat detailed.

***Level 4*:** Intern always provides accurate and timely feedback with great detail which allows clients to make use of the feedback during the lesson.

200. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

201. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

202. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

203. At the completion of an O&M internship, what level of performance in the competency skill of PROVIDING FEEDBACK TO CLIENTS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 29 - Reflecting on Teaching

204. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 29 - Reflecting on Teaching

205. Is this competency skill representative of the competency domain INSTRUCTION?

- ☐ Yes
- ☐ No

If no, why?

Skill 29 - Reflecting on Teaching

206. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 29 - Reflecting on Teaching - Performance Levels:

***Level 1*:** Intern has no suggestions for how a lesson may be improved or how his/her performance affected the clients' acquisition of skills.

***Level 2*:** Intern inconsistently makes suggestions about how to improve a lesson but rarely reflects on how his/her performance affected the clients' acquisition of skills.

***Level 3*:** Intern consistently makes basic suggestions about how a lesson may be improved and occasionally reflects on how his/her performance affected the clients' acquisition of skills.

***Level 4*:** Intern always offers specific suggestions about how a lesson may be improved and always evaluates his/her impact upon the clients' acquisition of skills.

207. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

208. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

209. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

210. At the completion of an O&M internship, what level of performance in the competency skill of REFLECTING ON TEACHING do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

The questions you just completed were regarding the Instruction Domain and the following 12 competency skills:

Skill 18 - Introducing Lessons

Skill 19 - Teaching Use of Low Vision and Other Senses

Skill 20 - Teaching Human Guide Techniques

Skill 21 - Teaching Indoor Mobility Techniques

Skill 22 - Teaching Outdoor Mobility Techniques

Skill 23 - Teaching Indoor Orientation Skills

Skill 24 - Teaching Outdoor Orientation Skills

Skill 25 - Managing the Lessons

Skill 26 - Using Instructional Strategies

Skill 27 - Gauging Acquisition of Skills

Skill 28 - Providing Feedback to Clients

Skill 29 - Reflecting on Teaching

211. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- ☐ Yes
- ☐ No

If yes, what skills should be added?

DOMAIN 5: The **Monitoring and Safety Domain** contains 3 competency skills:

Skill 30 - Monitoring O&M Skills

Skill 31 - Recognizing Potentially Dangerous Situations

Skill 32 - Intervening

The next 3 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 30 - Monitoring O&M Skills

211. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 30 - Monitoring O&M Skills

212. Is this competency skill representative of the competency domain MONITORING AND SAFETY?

- ☐ Yes
- ☐ No

If no, why?

Skill 30 - Monitoring O&M Skills

213. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 30 - Monitoring O&M Skills - Performance Levels:

***Level 1*:** Intern is not positioned to monitor O&M skills or is often distracted and does not maintain active engagement in the lessons.

***Level 2*:** Intern inconsistently maintains active engagement in the lessons - positioning lacks fluidity (remains in same position throughout the lessons) and the intern is fixated only on the clients' skills and not monitoring the environment as well.

***Level 3*:** Intern consistently maintains active engagement in the lessons - positioning is fluid throughout the lessons and intern usually monitors both the clients' skills and the environment as well.

***Level 4*:** Intern always maintains active engagement - positioning is fluid throughout lesson and intern consistently monitors both the clients' skills and the environment.

214. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

215. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

216. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

217. At the completion of an O&M internship, what level of performance in the competency skill of MONITORING O&M SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 31 - Recognizing Potentially Dangerous Situations

218. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 31 - Recognizing Potentially Dangerous Situations

219. Is this competency skill representative of the competency domain MONITORING AND SAFETY?

- ☐ Yes
- ☐ No

If no, why?

Skill 31 - Recognizing Potentially Dangerous Situations

220. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 31 - Recognizing Potentially Dangerous Situations – Performance Levels:

***Level 1*:** Intern does not recognize potentially dangerous situations during the lessons.

***Level 2*:** Intern inconsistently recognizes potentially dangerous situations but does not position himself/herself quickly enough to protect the client or intervene.

***Level 3*:** Intern consistently recognizes potentially dangerous situations and usually positions himself/herself quickly enough to protect the client or intervene.

***Level 4*:** Intern always recognizes potentially dangerous situations several feet before the client encounters the situation and positions himself/herself to protect client or intervene.

221. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- [ ] Yes
- [ ] No

If no, why?

222. How much do you agree with the wording of these performance levels?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

223. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

224. At the completion of an O&M internship, what level of performance in the competency skill of RECOGNIZING POTENTIALLY DANGEROUS SITUATIONS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 32 - Intervening

225. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 32 - Intervening

226. Is this competency skill representative of the competency domain MONITORING AND SAFETY?

- ☐ Yes
- ☐ No

If no, why?

Skill 31 - Recognizing Potentially Dangerous Situations

227. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 32 - Intervening - Performance Levels:

***Level 1*:** Intern does not recognize when it is appropriate to intervene (e.g. when client is frustrated, disoriented, off-task, etc) or responds inappropriately based on the clients' performance or emotional state.

***Level 2*:** Intern inconsistently recognizes when it is appropriate to intervene and/or inconsistently responds appropriately based on the clients' performance or emotional state.

***Level 3*:** Intern consistently recognizes when it is appropriate to intervene and usually responds appropriately based on the clients' performance or emotional state.

***Level 4*:** Intern always recognizes when it is appropriate to intervene and always responds appropriately based on the clients' performance or emotional state.

228. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

229. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

230. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

231. At the completion of an O&M internship, what level of performance in the competency skill of INTERVENING do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

The questions you just completed were regarding the Monitoring and Safety Domain and the following 3 competency skills:

Skill 30 - Monitoring O&M Skills

Skill 31 - Recognizing Potentially Dangerous Situations

Skill 32 – Intervening

232. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- ☐ Yes
- ☐ No

If yes, what skills should be added?

DOMAIN 6: The **Facilitating Independence Domain** contains 4 competency skills:

Skill 33 - Fostering High Expectations

Skill 34 - Facilitating Self-Advocacy Skills

Skill 35 - Facilitating Problem Solving Skills

Skill 36 - Facilitating Decision Making Skills

The next 4 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 33 - Fostering High Expectations

233. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 33 - Fostering High Expectations

234. Is this competency skill representative of the competency domain FACILITATING INDEPENDENCE?

- ☐ Yes
- ☐ No

If no, why?

Skill 33 - Fostering High Expectations

235. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 33 - Fostering High Expectations - Performance Levels:

***Level 1*:** Intern does not select instructional goals and lessons that are obtainable or challenging.

***Level 2*:** Intern inconsistently selects instructional goals and lessons that are obtainable but are rarely challenging.

***Level 3*:** Intern consistently selects instructional goals and lessons that are obtainable and usually challenging but only sometimes builds on clients' level of confidence as lessons progress.

***Level 4*:** Intern always selects obtainable and challenging instructional goals and lessons that are always aimed at facilitating independence and builds on clients' level of confidence as lessons progress.

236. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

237. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

238. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

239. At the completion of an O&M internship, what level of performance in the competency skill of FOSTERING HIGH EXPECTATIONS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 34 - Facilitating Self-Advocacy Skills

240. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 34 - Facilitating Self-Advocacy Skills

241. Is this competency skill representative of the competency domain FACILITATING INDEPENDENCE?

- ☐ Yes
- ☐ No

If no, why?

Skill 34 - Facilitating Self-Advocacy Skills

242. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 34 - Facilitating Self-Advocacy Skills - Performance Levels:

***Level 1*:** Intern does not foster advocacy skills of clients by interfering when clients have a need to interact with the public.

***Level 2*:** Intern inconsistently fosters advocacy skills of clients, but does not debrief or engage clients in discussion about strategies (e.g. role playing, replaying the situation) useful for developing self-advocacy skills.

***Level 3*:** Intern consistently fosters advocacy skills of clients and occasionally debriefs or engages clients in discussion about strategies (e.g. role playing, replaying the situation) useful for developing self-advocacy skills, but intern rarely encourages the client to take the initiative during the debriefing.

***Level 4*:** Intern always fosters advocacy skills of clients and always debriefs or engages clients in discussion about strategies (e.g. role playing, replaying the situation) useful for developing self-advocacy skills in a way that encourages the client to take the initiative during the debriefing.

243. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

244. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

245. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

246. At the completion of an O&M internship, what level of performance in the competency skill of FACILITATING SELF-ADVOCACY SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 35 - Facilitating Problem Solving Skills

247. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 35 - Facilitating Problem Solving Skills

248. Is this competency skill representative of the competency domain FACILITATING INDEPENDENCE?

- ☐ Yes
- ☐ No

If no, why?

Skill 35 - Facilitating Problem Solving Skills

249. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 35 - Facilitating Problem Solving Skills - Performance Levels:

***Level 1*:** Intern provides the solution to clients for resolving O&M problems and does not facilitate a discussion to allow them to foster independent problem solving skills.

***Level 2*:** Intern inconsistently attempts to engage clients in discussions when problems occur, but does not use open-ended guided questions in order to foster independent problem solving skills.

***Level 3*:** Intern consistently attempts to engage clients in discussion using open-ended guided questions in order to facilitate problem solving skills, but the intern is often unable to gauge when it is appropriate to cease asking open-ended questions to foster independence.

***Level 4*:** Intern always engages clients in discussion in order to facilitate problem solving skills through the initial use of open-ended questions and eventual withdraw of such questioning to foster independence.

250. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

251. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

252. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

253. At the completion of an O&M internship, what level of performance in the competency skill of FACILITATING PROBLEM SOLVING SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 36 - Facilitating Decision Making Skills

254. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 36 - Facilitating Decision Making Skills

255. Is this competency skill representative of the competency domain FACILITATING INDEPENDENCE?

- ☐ Yes
- ☐ No

If no, why?

Skill 36 - Facilitating Decision Making Skills

256. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 36 - Facilitating Decision Making Skills - Performance Levels:

***Level 1*:** Intern does not attempt to expose clients to a variety of O&M experiences (e.g. choice of skill based on various environmental conditions) or does not engage clients in making decisions related to the skills that would be best used in those environmental conditions.

***Level 2*:** Intern inconsistently attempts to expose clients to a variety of O&M experiences (e.g. choice of skill based on various environmental conditions), and occasionally engages clients in making decisions related to the skills that would be best used in those environmental conditions, but does not tailor the experience to client skill level.

***Level 3*:** Intern consistently exposes clients to a variety of O&M experiences (e.g. choice of skill based on various environmental conditions), engages clients in making decisions related to the skills that would be best used in those environmental conditions, and attempts with variable success to tailor the experience to client skill level.

***Level 4*:** Intern always exposes clients to a variety of O&M experiences (e.g. choice of skill based on various environmental conditions), is adept at engaging clients in making decisions related to the skills that would be best used in those environmental conditions, and tailors the experiences to client skill level.

257. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

258. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

259. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

260. At the completion of an O&M internship, what level of performance in the competency skill of FACILITATING DECISION MAKING SKILLS do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

The questions you just completed were regarding the Facilitating Independence Domain and the following 4 competency skills:

Skill 33 - Fostering High Expectations

Skill 34 - Facilitating Self-Advocacy Skills

Skill 35 - Facilitating Problem Solving Skills

Skill 36 - Facilitating Decision Making Skills

261. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- ☐ Yes
- ☐ No

If yes, what skills should be added?

DOMAIN 7: The **Professionalism Domain** contains 4 competency skills:

Skill 37 - Maintaining Professional Conduct

Skill 38 - Utilizing Resources

Skill 39 - Scheduling

Skill 40 - Record Keeping and Reporting

The next 4 pages of this survey will focus on these competency skills. You will be asked a series of questions about each of the skills and the performance levels within them.

Skill 37 - Maintaining Professional Conduct

262. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 37 - Maintaining Professional Conduct

263. Is this competency skill representative of the competency domain PROFESSIONALISM?

- ☐ Yes
- ☐ No

If no, why?

Skill 37 - Maintaining Professional Conduct

264. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 37 - Maintaining Professional Conduct - Performance Levels:

***Level 1*:** Intern does not maintain the standards of acceptable behavior defined in the Code of Ethics for O&M Specialists.

***Level 2*:** Intern inconsistently maintains the standards of acceptable behavior defined in the Code of Ethics for O&M Specialists.

***Level 3*:** Intern consistently maintains most of the standards of acceptable behavior defined in the Code of Ethics for O&M Specialists.

***Level 4*:** Intern always maintains all of the standards of acceptable behavior defined in the Code of Ethics for O&M Specialists.

265. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

266. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

267. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

268. At the completion of an O&M internship, what level of performance in the competency skill of MAINTAINING PROFESSIONAL CONDUCT do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

Skill 38 - Utilizing Resources

269. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

Skill 38 - Utilizing Resources

270. Is this competency skill representative of the competency domain PROFESSIONALISM?

- ☐ Yes
- ☐ No

If no, why?

Skill 38 - Utilizing Resources

271. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 38 - Utilizing Resources - Performance Levels:

***Level 1*:** Intern does not utilize resources to available within the internship setting in order to improve practice.

***Level 2*:** Intern sometimes utilizes resources available within the internship setting in order to improve practice.

***Level 3*:** Intern consistently utilizes resources available within the internship setting and occasionally accesses resources available through local, state, or national professional organizations in order to improve practice.

***Level 4*:** Intern always utilizes resources available within the internship setting as well as resources available through local, state, and national professional organizations in order to improve practice.

272. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- [ ] Yes
- [ ] No

If no, why?

273. How much do you agree with the wording of these performance levels?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

274. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

275. At the completion of an O&M internship, what level of performance in the competency skill of UTILIZING RESOURCES do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 39 - Scheduling

276. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 39 - Scheduling

277. Is this competency skill representative of the competency domain PROFESSIONALISM?

- ☐ Yes
- ☐ No

If no, why?

Skill 39 - Scheduling

278. How essential is this skill in demonstrating clinical competency in O&M?

- ☐ Not essential
- ☐ Somewhat essential
- ☐ Essential
- ☐ Absolutely essential

Skill 39 - Scheduling - Performance Levels:

***Level 1*:** Intern is constantly late for lessons or meetings and/or misses lessons or meetings.

***Level 2*:** Intern is inconsistently punctual for lessons or meetings and/or does not allot the appropriate amount of time for lessons or meetings.

***Level 3*:** Intern is consistently punctual for lessons or meetings and usually allots the appropriate amount of time for lessons or meetings.

***Level 4*:** Intern is always punctual and always allots the appropriate amount of time for lessons and meetings.

279. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

280. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

281. Is there any wording in these performance levels you would change?

- [ ] No
- [ ] Yes

If yes, what specifically would you change?

282. At the completion of an O&M internship, what level of performance in the competency skill of SCHEDULING do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- [ ] Level 1
- [ ] Level 2
- [ ] Level 3
- [ ] Level 4

Skill 40 - Record Keeping and Reporting

283. How much do you agree that this competency skill is relevant to the profession of O&M and to the professional standards?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Agree
- [ ] Strongly agree

Skill 40 - Record Keeping and Reporting

284. Is this competency skill representative of the competency domain PROFESSIONALISM?

- [ ] Yes
- [ ] No

If no, why?

Skill 40 - Record Keeping and Reporting

285. How essential is this skill in demonstrating clinical competency in O&M?

- [ ] Not essential
- [ ] Somewhat essential
- [ ] Essential
- [ ] Absolutely essential

Skill 40 - Record Keeping and Reporting - Performance Levels:

***Level 1*:** Intern‘s records on clients are not kept up-to-date, inaccurate, or in disarray.

***Level 2*:** Intern’s records on clients are inconsistently kept up-to-date, accurate, and somewhat organized.

***Level 3*:** Intern’s records on clients are consistently up-to-date, accurate, and organized but lack detail.

***Level 4*:** Intern’s records on clients are always up-to-date, accurate, organized, and thorough.

286. Does this performance scale provide a sequential progression that is sensitive enough to capture performance ranging from poor to exceptional?

- ☐ Yes
- ☐ No

If no, why?

287. How much do you agree with the wording of these performance levels?

- ☐ Strongly disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly agree

288. Is there any wording in these performance levels you would change?

- ☐ No
- ☐ Yes

If yes, what specifically would you change?

289. At the completion of an O&M internship, what level of performance in the competency skill of RECORD KEEPING AND REPORTING do you think an O&M intern should have acquired in order to qualify for ACVREP certification?

- ☐ Level 1
- ☐ Level 2
- ☐ Level 3
- ☐ Level 4

The questions you just completed were regarding the Professionalism Domain and the following 4 competency skills:

Skill 37 - Maintaining Professional Conduct

Skill 38 - Utilizing Resources

Skill 39 - Scheduling

Skill 40 - Record Keeping and Reporting

290. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

- ☐ Yes
- ☐ No

If yes, what skills should be added?

These last few questions pertain to the overall format of the O&M CCEM.

291. Do you feel the 4 performance level format is appropriate to assess the clinical competencies?

- ☐ Yes
- ☐ No

If no, what format would you recommend?

292. Would you consider using this evaluation tool as a means to assessing the clinical competencies of your O&M interns for university purposes?

- ☐ Yes
- ☐ No

Additional comments

Thank you for completing this survey. Your participation is appreciated! Please enter your name and address below so you can be entered into a drawing for $200 to compensate you for your time. Again, this information will not be connected to your responses.

Please enter your name and address below:

_____

APPENDIX H

COMPARISON OF COMPETENCY SKILLS ON INITIAL AND FINAL VERSIONS

Table 27: Comparison of Competency Skills on Initial and Final Versions of the O&M CCEM

Domain	Competency Skills Initial Version	Competency Skills Final Version
Domain 1: Communication and Professional Relationships	Skill 1: Establishing Rapport Skill 2: Communicating with Clients Skill 3: Communicating with Families Skill 4: Communicating with Colleagues Skill 5: Communicating with Supervisors	Skill 1: Establishing Rapport Skill 2: Orally Communicating with Clients Skill 3: Orally Communicating with Families Skill 4: Orally Communicating with Colleagues Skill 5: Orally Communicating with Supervisors Skill 6: Written Communication
Domain 2: O&M Assessment	Skill 6: Planning O&M Assessments Skill 7: Conducting O&M Assessments Skill 8: Synthesizing Findings in a Report Skill 9: Communicating Results	Skill 7: Planning O&M Assessments Skill 8: Conducting O&M Assessments Skill 9: Synthesizing Findings in a Report Skill 10: Orally Communicating Results
Domain 3: Instructional Planning	Skill 10: Reviewing and Interpreting Relevant Records Skill 11: Previewing and Selecting Potential Training Areas Skill 12: Considering Instructional Materials and Appropriate Devices Skill 13: Knowing Options for Mobility Systems	Skill 11: Knowing Options for Mobility Systems Skill 12: Reviewing and Interpreting Relevant Records Skill 13: Choosing Appropriate Goals Skill 14: Writing Appropriate Behavioral Objectives Skill 15: Previewing and Selecting

	Skill 14: Choosing Appropriate Goals Skill 15: Writing Appropriate Behavioral Objectives Skill 16: Developing Individualized Lessons Skill 17: Sequencing of Lessons	Potential Training Areas Skill 16: Developing Individualized Lessons Skill 17: Considering Instructional Materials and Appropriate Devices Skill 18: Sequencing of Lessons
Domain 4: Instruction	Skill 18: Introducing Lessons Skill 19: Teaching Use of Vision and Other Senses Skill 20: Teaching Human Guide Skill 21: Teaching Indoor Mobility Techniques Skill 22: Teaching Outdoor Mobility Techniques Skill 23: Teaching Indoor Orientation Skills Skill 24: Teaching Outdoor Orientation Skills Skill 25: Managing Lessons Skill 26: Using Instructional Strategies Skill 27: Gauging Acquisition of Skills Skill 28: Providing feedback to Clients Skill 29: Reflecting on Teaching	Skill 19: Teaching Use of Vision Skill 20: Teaching Use of Other Senses Skill 21: Human Guide Techniques Skill 22: Cane Techniques Skill 23: Orientation Skills Skill 24: Complex Environments Skill 25: Street Crossings Skill 26: Public Transportation Skill 27: Using Instructional Strategies Skill 28: Communicating During Lessons Skill 29: Managing Lessons Skill 30: Modifying Lessons Skill 31: Providing feedback to Clients Skill 32: Gauging Acquisition of Skills Skill 33: Reflecting on Teaching
Domain 5: Monitoring and Safety	Skill 30: Monitoring O&M Skills Skill 31: Recognizing Potentially Dangerous Situations Skill 32: Intervening	Skill 34: Monitoring O&M Skills Skill 35: Positioning During Lessons Skill 36: Recognizing Potentially Dangerous Situations Skill 37: Intervening
Domain 6: Facilitating Independence	Skill 33: Fostering High Expectations Skill 34: Facilitating Self-Advocacy Skills Skill 35: Facilitating Problem Solving Skills Skill 36: Facilitating Decision Making Skills	Skill 38: Promoting Participation Skill 39: Fostering Self-Assessment Skills Skill 40: Fostering Self-Advocacy Skills Skill 41: Facilitating Problem Solving Skills Skill 42: Facilitating Decision Making Skills

Domain 7: Professionalism	Skill 37: Maintaining Professional Conduct Skill 38: Utilizing Resources Skill 39: Scheduling Skill 40: Record Keeping and Reporting	Skill 43: Maintaining Professional Conduct Skill 44: Utilizing Resources Skill 45: Scheduling Skill 46: Record Keeping and Reporting Procedures

APPENDIX I

REQUEST FOR INFORMATION: O&M UNIVERSITY FACULTY

Letter to O&M faculty who participated in Phase 1

Dear Dr.____:

Thank you again for completing my survey on the new O&M Clinical Competency Evaluation Matrix (CCEM). Your feedback was invaluable. I am asking for your help one more time. I am ready to launch phase 2 of my dissertation and pilot the O&M CCEM. I am looking for O&M clinical internship supervisors to take a survey asking about the clinical competencies of their recent O&M interns using the O&M CCEM.

The easiest way to contact these individuals is through you. I am looking for O&M specialists who would have served, or are serving, as O&M clinical internship supervisors for YOUR O&M university students. In particular, I looking for the names and email addresses of the internship supervisors whose O&M intern would have completed or will complete his/her internship between July 15, 2009 and March 1, 2010. You can email me this information or I can call you for the information. If you would prefer that I call, please reply to this email and indicate a time that you would be available to talk.

Once I receive the email addresses, I will email the clinical internship supervisors and ask them to anonymously complete a survey. No identifiable information about the O&M intern or the internship supervisor will be asked, other than for potential payment purposes.

Thank you for your assistance in collecting this valuable information. I look forward to hearing from you.

Sincerely,

Rebecca

Letter to O&M faculty who did not participate in Phase 1

Dear Dr. ___:

Hi again. As you may remember, I asked you back in August how many O&M interns you expected to have during the fall semester. Well, I am finally ready to launch phase 2 of my dissertation and pilot the O&M Clinical Competency Evaluation Matrix (CCEM). I am looking for O&M clinical internship supervisors to take a survey asking about the clinical competencies of their recent O&M interns using the O&M CCEM.

The easiest way to contact these individuals is through you. I am looking for O&M specialists who would have served, or are serving, as O&M clinical internship supervisors for YOUR O&M university students. In particular, I looking for the names and email addresses of the internship supervisors whose O&M intern would have completed or will complete his/her internship between July 15, 2009 and March 1, 2010. You can email me this information or I can call you for the information. If you would prefer that I call, please reply to this email and indicate a time that you would be available to talk.

Once I receive the email addresses, I will email the clinical internship supervisors and ask them to anonymously complete a survey. No identifiable information about the O&M intern or the internship supervisor will be asked, other than for potential payment purposes.

Thank you for your assistance in collecting this valuable information. I look forward to hearing from you.

Sincerely,

Rebecca

APPENDIX J

INVITATION TO PARTICIPATE: O&M CLINICAL INTERNSHIP SUPERVISORS

Dear O&M Clinical Internship Supervisors:

My name is Rebecca Renshaw. I am a NCLVI Doctoral Fellow at the University of Pittsburgh. As part of my dissertation research, I am looking for participants to take a survey asking about the **clinical competencies of their recent O&M interns** using a new clinical internship evaluation tool. Specifically, I am looking for onsite internship supervisors whose O&M interns would have COMPLETED or WILL COMPLETE their internships between July 15, 2009 and March 1, 2010.

If you are interested in participating, I will need to complete a brief screening process to assure that you qualify and further explain the study. The phone call will take only 5-10 minutes. Please send your name, phone number and time of availability to me at [email address] or call me directly at ###-###-####.

Should you qualify and decide to participate in the research study, you will be asked to complete an online survey. Upon completion, you will have the option of receiving a **$20** debit card **OR** entering your name into a **drawing for a $300** debit card. For the drawing, one participant's name will be drawn from all entries.

Thank you. I hope you will consider participating and helping me collect this valuable information.

Sincerely,
Rebecca

APPENDIX K

O&M CCEM SURVEY

O&M CLINICAL COMPETENCY SURVEY

Welcome to the O&M Clinical Competency Survey. Thank you for your participation! This survey is a part of a dissertation research project at the University of Pittsburgh. The project has Institutional Review Board approval.

To qualify to complete the survey, you must meet each of the following criteria:

1. You must have served as an O&M clinical internship supervisor.
2. You must have supervised an O&M intern who COMPLETED his/her O&M internship with you between July 15, 2009 and March 1, 2010.
3. You should complete the survey only AFTER the O&M intern has completed his/her internship and AFTER the ACVREP clinical competency evaluation form has been filled out.

If you had *MORE THAN ONE* O&M intern between the dates posted above, please complete the survey focusing on *only ONE intern at a time* and complete it multiple times, once for each O&M intern.

The intent of this survey is to gather information about the content of a proposed clinical competency evaluation tool. Your participation is important to assist in developing a valid and reliable approach to evaluating clinical competencies of O&M interns.

The survey consists of FIVE PHASES.

Phase 1 will ask you some demographic questions.

Phase 2 will ask you about your O&M intern and his/her internship experience.

Phase 3 will ask you to evaluate your O&M intern using the current ACVREP clinical competency evaluation form.

Phase 4 will ask you to evaluate your O&M intern using a new Clinical Competency Evaluation Matrix (CCEM).

Phase 5 will ask you your opinion of the new CCEM.

The survey should take about **45 minutes** to complete. Please **allot the appropriate amount of time** as partial completions will not be saved. I know that seems like a significant amount of time, but the information you provide will be extremely valuable to the field of O&M.

To **thank you** for completing the survey, you will be given the option of either receiving a guaranteed **$20** debit card **OR** entering your name into a drawing for a **$300** debit card. At the completion of the survey you will be asked to provide your name and email address and indicate which option you have chosen. Your responses to the survey questions will not be linked to your name or other personally identifiable information. Your participation is voluntary and you can discontinue the survey at any point.

Please contact me at [EMAIL ADDRES] if you are unable to access the survey or have any questions regarding the study.

SECTION 1

To begin, please choose a "password". It can be anything. The password chosen should not be anything that would reveal your identity. After choosing the password, please write it down so you can recall it at a later point in time. This password may later be used to link your responses to the O&M intern's corresponding university supervisor's responses. A sample of university supervisors will be asked to also complete this survey. Should the corresponding university supervisor of your O&M intern be selected to participate he/she will be contacting you to ask for this password. Again, please do not select a password that would reveal your identity to the researcher.

This page will ask you five demographic questions related to your O&M training, your experience as an O&M specialist, and the number of O&M interns you have supervised.

Please enter a password:

Please refer to this map for the following two questions:

Dark blue = Northeast

Light blue = Southeast

Yellow = Midwest

Red = Southwest

Green = West

1. In what region of the United States did YOU receive your O&M training?

- ☐ Northeast
- ☐ Southeast
- ☐ Midwest
- ☐ Southwest
- ☐ West
- ☐ Outside the United States

Other (please specify)

2. In what region of the United States do you CURRENTLY work?

- ☐ Northeast
- ☐ Southeast
- ☐ Midwest
- ☐ Southwest
- ☐ West
- ☐ Outside the United States

Other (please specify)

3. How many years have you worked as an O&M Specialist?

- ☐ Less than a year
- ☐ 1-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16-20 years
- ☐ More than 20 years

4. In total, how many *O&M interns* have you supervised?

- ☐ None
- ☐ 1 student
- ☐ 2-5 students
- ☐ 6-10 students
- ☐ More than 10 students

SECTION 2

The next three pages will ask you questions related to your O&M intern and his/her internship experience.

5. From which O&M university program is/was the O&M intern receiving his/her O&M certification?

- ☐ California State University
- ☐ Florida State University
- ☐ Hunter College
- ☐ Massey University (New Zealand)
- ☐ Mohawk College
- ☐ North Carolina Central University
- ☐ Northern Illinois University
- ☐ Salus University (formerly PCO)
- ☐ San Francisco State University
- ☐ South Carolina State University

- ☐ Stephan F. Austin State University
- ☐ Texas Tech University
- ☐ University of Arizona
- ☐ University of Arkansas
- ☐ University of Louisville
- ☐ University of Massachusetts at Boston
- ☐ University of Northern Colorado
- ☐ University of Pittsburgh
- ☐ Western Michigan University
- ☐ Other

Other (please specify)

6. What is the gender of the O&M intern?

- ☐ Female
- ☐ Male

7. In which setting did the O&M intern complete his/her internship with you?

Please select all that apply.

- ☐ Early Intervention Program
- ☐ Specialized School for the Blind
- ☐ Public School Setting
- ☐ Adult Rehabilitation Agency (Private or Public)
- ☐ Veterans Administration Medical Center
- ☐ Other, please explain

Other (please specify)

8. Which population of students/clients did the O&M intern have experience working with/teaching during the internship?

Please select all that apply.

- ☐ Infants
- ☐ Preschoolers
- ☐ Elementary School-Aged Students
- ☐ Middle School-Aged Students
- ☐ High School-Aged Students

- [ ] Young Adults
- [ ] Adults
- [ ] Older Adults
- [ ] Individuals with cognitive disabilities
- [ ] Individuals with health problems
- [ ] Individuals with hearing impairments
- [ ] Individuals with physical disabilities

Other (please specify)

9. Which of the following Sighted Guide Techniques did your intern have experience in providing *direct instruction* to students/clients during the internship?

Please select all that apply.

- [ ] Basic technique
- [ ] Reversing directions
- [ ] Transferring sides
- [ ] Narrow passageways
- [ ] Accepting or refusing assistance
- [ ] Stairways
- [ ] Doorways
- [ ] Seating
- [ ] All of the above
- [ ] Other

Other, please specify

10. Which of the following Self-Protective and Orientation Techniques did your intern have experience in providing *direct instruction* to students/clients during the internship?

Please select all that apply.

- [ ] Trailing
- [ ] Transversing open doorways
- [ ] Direction taking
- [ ] Search patterns
- [ ] Dropped objects
- [ ] Contacting objects

- [ ] Examining objects
- [ ] Use of senses for orientation
- [ ] Numbering systems
- [ ] Compass directions
- [ ] Use of non-optical low vision devices during O&M
- [ ] Use of optical low vision devices during O&M
- [ ] All of the above
- [ ] Other

Other, please specific

11. Which of the following Cane Techniques did your intern have experience in providing *direct instruction* to students/clients during the internship?

Please select all that apply.

- [ ] Parts of a cane
- [ ] Constant contact
- [ ] Diagonal
- [ ] Two-point touch
- [ ] Shorelining
- [ ] Touch and drag
- [ ] Touch and slide
- [ ] Three-point touch
- [ ] All of the above
- [ ] Other

Other, please specify

12. In which of the following Travel Environments did your intern have experience in providing *direct instruction* to students/clients during the internship?

Please select all that apply.

- [ ] Indoor travel
- [ ] Rural travel
- [ ] Residential sidewalk travel
- [ ] Small business travel
- [ ] Medium business travel

- [ ] Large business travel
- [ ] Mall travel
- [ ] Bus travel
- [ ] Subway travel
- [ ] Airport travel
- [ ] All of the above
- [ ] Other

Other, please specify

13. In regard to intersections, which of the following Types of Traffic Control did your intern have experience in providing *direct instruction* to students/clients during the internship?

Please select all that apply.

- [ ] No traffic control
- [ ] Stop-sign traffic control
- [ ] Lighted traffic control
- [ ] Pedestrian controlled street crossings
- [ ] Fixed cycles
- [ ] Actuated cycles
- [ ] All of the above
- [ ] Other

Other, please specify

14. In regard to intersections, which of the following Spatial Configurations did your intern have experience in providing *direct instruction* to students/clients during the internship?

Please select all that apply.

- [ ] Plus intersection
- [ ] T-intersection
- [ ] Y-intersection
- [ ] Off-set intersection
- [ ] Intersection with turning lanes
- [ ] Intersection with pedestrian islands
- [ ] Right turn on red

☐ All of the above

☐ Other

Other, please specify

SECTION 3

The questions on the next four pages will ask the SAME questions that were asked of you when you completed the ACVREP clinical competency evaluation form on your intern at the completion of his/her internship. When making your choices, please select the **SAME** answers you did when completing the actual ACVREP clinical competency evaluation form (ACVREP, 2001)

As you may know, ACVREP requires *successful completion of 350 hours of O&M discipline specific, supervised practice that includes, but is not limited to, direct service hours, and related phone calls, meetings, observations, report writing, etc*; however, that number may vary between interns and placements.

15. What was the total number of O&M discipline specific internship hours completed by your O&M intern?

_____

16. What were the DATES of the internship?

Date **BEGAN:** MM DD YYYY

Date **COMPLETED:** MM DD YYYY

17. DOMAIN 1: COMMUNICATION AND PROFESSIONAL RELATIONSHIPS

Candidate is able to establish and maintain effective communication and professional relationships with students, families, colleagues, and supervisors, including individuals from culturally and linguistically diverse backgrounds.

☐ Met

☐ Not Met

18. DOMAIN 2: O&M ASSESSMENT

Candidate is able to plan and conduct individualized comprehensive O&M assessments, synthesize the findings in a professionally written report, and communicate results with students, families, and members of the individualized intervention/education/rehabilitation team, as appropriate.

- ☐ Met
- ☐ Not Met

19. DOMAIN 3: INSTRUCTIONAL PLANNING

Candidate is able to plan for individualized O&M instruction through the review and interpretation of relevant records and reports.

- ☐ Met
- ☐ Not Met

20. DOMAIN 3: INSTRUCTIONAL PLANNING

Candidate is able to plan for individualized O&M instruction through the selection and preview of potential training areas (e.g., home, school, work or community).

- ☐ Met
- ☐ Not Met

21. DOMAIN 3: INSTRUCTIONAL PLANNING

Candidate is able to plan for individualized O&M instruction through the design and/or procurement of instructional materials and appropriate devices (with appropriate medical consultation regarding optical devices).

- ☐ Met
- ☐ Not Met

22. DOMAIN 3: INSTRUCTIONAL PLANNING

Candidate is able to plan for individualized O&M instruction through the provision of accurate information regarding options for mobility systems (e.g., long cane, dog guide, electronic travel devices) to the student and his/her family so that s/he can make informed choices regarding the most appropriate option for a given time.

- ☐ Met
- ☐ Not Met

23. DOMAIN 3: INSTRUCTIONAL PLANNING

Candidate is able to plan for individualized O&M instruction through the collaboration with the student, his/her family, and colleagues to develop appropriate goals and behavioral objectives, and development and sequencing of individual lessons based on the student's abilities, needs, and goals.

- ☐ Met
- ☐ Not Met

24. DOMAIN 4: INSTRUCTION

Candidate is able to effectively teach and reinforce the following elements of O&M instruction across a range of environments (such as indoor, residential, and light business): Concepts related to independent movement and orientation (such as body, laterality, directionality, spatial, environmental, and time-distance).

- ☐ Met
- ☐ Not Met

25. DOMAIN 4: INSTRUCTION

Candidate is able to effectively teach and reinforce the following elements of O&M instruction across a range of environments (such as indoor, residential, and light business): Mobility techniques, including, but not limited to, basic skills, cane skills, adapted mobility devices, route travel, street crossings, and the use of public and other transportation systems.

- ☐ Met
- ☐ Not Met

26. DOMAIN 4: INSTRUCTION

Candidate is able to effectively teach and reinforce the following elements of O&M instruction across a range of environments (such as indoor, residential, and light business): Orientation skills, including, but not limited to, use of cognitive processes; landmarks; cardinal directions; room, store, and community familiarization; address system; independent information gathering; route planning; and maps.

- ☐ Met
- ☐ Not Met

27. DOMAIN 4: INSTRUCTION

Candidate is able to effectively teach and reinforce the following elements of O&M instruction across a range of environments (such as indoor, residential, and light business): Use of low vision in maintaining safe and independent movement and orientation (such as the use of non-optical devices, use of optical devices in conjunction with eye care professionals, use of visual skills, and incorporating vision use with cane or other mobility systems).

- ☐ Met
- ☐ Not Met

28. DOMAIN 4: INSTRUCTION

Candidate is able to effectively teach and reinforce the following elements of O&M instruction across a range of environments (such as indoor, residential, and light business): Use of remaining senses (other than vision) in maintaining safe and independent movement and orientation (such as the use of auditory skills, reflected sound, tactile recognition, proprioceptive and kinesthetic awareness).

- ☐ Met
- ☐ Not Met

29. DOMAIN 5: MONITORING AND SAFETY

Candidate is able to effectively monitor orientation and mobility skills, recognize potentially dangerous situations, and intervene as appropriate to ensure student safety.

- ☐ Met
- ☐ Not Met

30. DOMAIN 6: FACILITATING INDEPENDENCE

Candidate is able to facilitate student independence and problem solving ability across a variety of travel situations, in familiar and unfamiliar environments.

- ☐ Met
- ☐ Not Met

31. DOMAIN 7: PROFESSIONALISM

Candidate demonstrates professional conduct consistent with the Code of Ethics for Orientation & Mobility Specialists, finds and accesses appropriate resources, keeps on-time scheduling, and follows and maintains appropriate record keeping and reporting Procedures.

- ☐ Met
- ☐ Not Met

As you know, the current standards for evaluating clinical competency of O&M interns are provided by ACVREP. How much do you agree with the following statements describing the current ACVREP clinical competency evaluation form?

32. The current ACVREP clinical competency form provides a *clear description* of the clinical competency skills for O&M interns.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

33. The current ACVREP clinical competency form includes *all* the clinical competencies necessary for an O&M intern to obtain certification.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

34. The current ACVREP clinical competency form allows *objective measurement* of the O&M intern's clinical competencies.

- ☐ Strongly Disagree
- ☐ Disagree
- ☐ Agree
- ☐ Strongly Agree

SECTION 4

The next eight pages will ask you to again evaluate the clinical competency skills of your O&M intern. However, this time you will be asked to use a **NEW clinical evaluation tool** that breaks down the competency domains into specific competency skills.

This new tool, called the O&M Clinical Competency Evaluation Matrix (O&M CCEM), is designed to support your evaluation by providing more detail within the performance levels for each of the competency skills.

It is **VERY** important that you read **ALL of the response options** for EACH competency skill before making your choice. Be sure to select one response for each competency skill. If you have not witnessed the intern executing a specific competency skill, mark “not applicable/ don't know”.

COMPETENCY DOMAIN 1: Communication and Professional Relationships

This competency domain measures the intern's ability to establish and maintain effective communication and professional relationships with students, families, colleagues, and supervisors, including individuals from culturally and linguistically diverse backgrounds. Please select the **BEST** answer.

35. In terms of Establishing Rapport by showing respect, thoughtfulness, patience, understanding, and empathy, the intern:

- ☐ was ***unable*** to relate to students/clients or families.
- ☐ ***attempted*** to relate to ***some*** students/clients or families
- ☐ ***consistently attempted*** to relate to ***all*** students/clients and families.
- ☐ ***always*** demonstrated an ability to ***comfortably*** relate to ***all*** students/clients and families.
- ☐ Not applicable/ don't know

36. In terms of Orally Communicating with Students/Clients, the intern's interactions with students/clients were:

☐ ***negative, demeaning, or inappropriate*** based on the ages, abilities, or cultural backgrounds of the students/clients.

☐ ***generally*** friendly and personable ***but*** reflected ***inconsistencies or disregard*** for students'/clients' ages, abilities, or cultural backgrounds.

☐ ***friendly*** and demonstrated ***general*** warmth, caring, and respect with a ***consistent attempt*** to consider the students'/clients' ages, abilities, and cultural backgrounds.

☐ ***always*** genuine, caring, respectful, ***and*** appropriate based on students'/clients' ages, abilities, and cultural backgrounds.

☐ Not applicable/ don't know

37. In terms of Orally Communicating with Families, the intern's communication with families was:

☐ ***rare or nonexistent***, or responses were ***insensitive*** to families' concerns.

☐ initiated only after ***families*** requested ***or*** responses to families' concerns were ***minimal*** but usually showed a ***basic*** level of sensitivity.

☐ initiated by the ***intern*** or responses to concerns were ***somewhat*** thorough and ***consistently*** showed a basic level of sensitivity.

☐ ***frequent***, ***thorough***, and handled with ***great*** sensitivity. In addition, the intern went above and beyond to provide additional information.

☐ Not applicable/ don't know

38. In terms of Orally Communicating with Team Members, the intern's relationships with team members/colleagues were:

☐ negative, passive, ***or*** unconstructive.

☐ ***cordial*** in order to fulfill the duties that the school/agency required.

☐ supportive, cooperative, ***and*** collaborative.

☐ supportive, cooperative, and collaborative ***and*** the intern took initiative in assuming a leadership role.

☐ Not applicable/ don't know

39. In terms of Orally Communicating with Supervisors, the intern demonstrated:

☐ ***little*** or ***no*** respect for authority and/or did ***not*** initiate interactions with the supervisor in order to seek advice.

☐ a ***basic*** level of respect for authority and/or ***occasionally*** initiated interactions with the supervisor, ***but*** contributions in those interactions were minimal.

☐ ***respect*** for authority, ***consistently*** initiated interactions with supervisor, and ***occasionally*** contributed to the interactions by asking basic, appropriate questions.

☐ ***constant*** respect for authority, ***frequently*** initiated interactions with supervisor, and ***fully*** contributed to the interactions by asking insightful and appropriate questions.

☐ Not applicable/ don't know

40. In terms of Written Communication, the intern's written language contained:

☐ ***many*** grammatical errors ***and/or*** vocabulary was vague, used incorrectly, or inappropriate.

☐ ***some*** grammatical errors ***and/or*** vocabulary was ***inconsistently*** clear, correct, or appropriate.

☐ ***few*** grammatical errors ***and/or*** vocabulary was ***consistently*** clear, correct, and appropriate.

☐ ***no*** grammatical errors ***and/or*** vocabulary was ***always*** clear, correct, appropriate ***and*** tailored to the person with whom he/she was communicating.

☐ Not applicable/ don't know

41. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?

If you select “yes”, use the textbox below to clarify which competency skill(s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

COMPETENCY DOMAIN 2: O&M Assessments

This competency domain measures the intern's ability to plan and conduct individualized comprehensive O&M assessments, synthesize the findings in a professionally written report, and communicate results with students, families, and members of the individualized intervention/education/rehabilitation teams, as appropriate.

Please select the **BEST** answer.

42. In terms of Planning O&M Assessments and knowing the components of the assessment, such as conducting interviews, reviewing records, selecting appropriate assessment tools and environments based on the student/client, and planning appropriate activities, the intern was:

☐ ***unaware*** of the components for planning O&M assessments and ***unable*** to plan appropriate activities.

☐ aware of ***some*** of the basic components for planning O&M assessments, but demonstrated ***little attempt*** to plan appropriate activities within those components.

☐ aware of ***all*** of the components for planning O&M assessments and demonstrated an attempt to plan ***appropriate*** activities within ***some*** of those components.

☐ knowledgeable of ***all*** the components for planning O&M assessments and ***comprehensively*** planned appropriate activities within ***all*** the components.

☐ Not applicable/ don't know

43. In terms of Conducting O&M Assessments, the intern:

☐ was ***unable*** to make relevant observations and ***rarely*** asked appropriate questions to gather additional information from the students/clients during the O&M assessments.

☐ ***inconsistently*** made relevant observations and ***occasionally*** asked appropriate questions, ***but*** the O&M assessments were executed in an apparent random, segmented format.

☐ ***consistently*** made relevant observations, gathered information using ***general*** questions, and conducted the O&M assessments with ***some fluidity*** across components.

☐ executed ***all*** components of the O&M assessments ***seamlessly*** while making ***keen*** observations and asking ***specific*** questions to gather additional information.

☐ Not applicable/ don't know

44. In terms of Synthesizing Findings in a Written Report, the intern:

☐ was ***unable*** to generate reports that ***coherently and accurately*** explained the O&M assessment results.

☐ ***inconsistently*** generated reports that ***coherently and accurately*** explained the O&M assessment results ***and*** made ***general*** O&M recommendations that were ***not necessarily*** linked to the O&M assessment results.

☐ ***consistently*** generated reports that ***coherently and accurately*** explained the O&M assessment results and made ***some*** O&M recommendations linked to O&M assessment results.

☐ ***always*** generated reports that were ***coherent, accurate, and detailed***. In addition, the intern was able to ***synthesize all*** of the results to formulate O&M recommendations related to ***all*** areas assessed.

☐ Not applicable/ don't know

45. In terms of Orally Communicating Results of the O&M assessment to students/clients, families, and/or other team members, the intern:

☐ ***did not*** communicate results.

☐ ***attempted*** to explain the assessment results ***but*** the explanations were incomplete, vague, or language used was inappropriate.

☐ ***consistently*** attempted to explain the assessment results in a clear, complete, and appropriate way ***but*** did not provide ***specific*** examples and suggestions to implement immediately.

☐ always ***clearly*** articulated the results ***and*** connected the assessment results to the recommendations by providing ***specific*** examples and suggestions to implement immediately.

☐ Not applicable/ don't know

46. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?

If you select “yes”, use the textbox below to clarify which competency skill(s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

COMPETENCY DOMAIN 3: Instructional Planning

This competency domain measures the intern's ability to plan for individualized O&M instruction through the: review and interpretation of relevant records and reports; selection and preview of potential training areas; design and/or procurement of instructional materials and appropriate devices; provision of accurate information regarding options for mobility systems to the student and his/her family so that he/she can make informed choices regarding the most appropriate option for the given time; and collaboration with the student, his/her family, and colleagues to develop appropriate goals and behavioral objectives, and development and sequencing of individual lessons based on the student's abilities, needs, and goals.

Please select the **BEST** answer.

47. In terms of Knowing Options for Mobility Systems such as human guide, long cane and the various types, adaptive mobility devices, dog guide, and electronic travel devices, the intern:

☐ was ***unaware*** of the range of mobility system options available ***or did not*** provide recommendations to students/clients and/or families.

☐ was ***aware*** of the range of mobility system options ***but sometimes*** articulated ***inaccurate*** information or provided an ***inappropriate*** recommendations to students/clients and/or families.

☐ was ***fully aware*** of mobility system options and articulated ***accurate*** information when providing an ***appropriate*** recommendations to students/clients and/or families.

☐ displayed ***extensive*** knowledge of mobility systems and was ***adept*** at understanding students/clients and/or families perspectives and in engaging students/clients and/or families in making an informed and appropriate decision for themselves.

☐ Not applicable/ don't know

48. In terms of Reviewing and Interpreting Relevant Records, the intern:

☐ ***did not*** review ***all*** relevant records and reports when planning O&M instruction ***or was unable*** to interpret the reports for use in instructional planning.

☐ reviewed ***some*** relevant records and reports when planning instruction and ***inconsistently*** interpreted information at a ***basic*** level to determine instructional areas.

☐ reviewed ***all*** relevant records and reports and ***consistently*** interpreted the information at a ***basic*** level to determine instructional areas and starting points for instruction within ***some*** of those areas.

☐ ***accurately synthesized*** at a deeper level ***all*** relevant records and reports when determining instructional areas and starting points for instruction within ***all*** those areas.

☐ Not applicable/ don't know

49. In terms of Choosing Appropriate Goals, the intern:

☐ chose lesson goals that were ***not clear, specific, or appropriate*** based on the students/clients needs.

☐ ***inconsistently*** chose lesson goals that were ***clear, specific or appropriate*** based on the students'/clients' needs.

☐ ***consistently*** chose lesson goals that were ***clear, specific and appropriate*** based on the students'/clients' needs.

☐ ***always*** chose goals that are ***clear, specific, and appropriate*** based on the students'/clients' needs ***and*** also ***explicitly engaged*** students/clients and/or families in the goal making process.

☐ Not applicable/ don't know

50. In terms of Writing Appropriate Behavioral Objectives, the intern:

☐ ***did not*** write behavioral objectives that were ***clear or related*** to the goal of the lessons.

☐ ***inconsistently*** wrote ***general*** behavioral objectives that ***related*** to the goal of the lessons ***but*** objectives either ***lacked detail*** regarding the specific components needed to achieve the goal or ***were not*** measureable.

☐ ***consistently*** wrote behavioral objectives that were ***clear*** and reflected the ***breakdown of specific*** components needed to achieve the goal ***but some*** objectives are ***not*** measureable.

☐ ***always*** wrote behavioral objectives that were clear, reflected the breakdown of the specific components, ***and*** were measureable.

☐ Not applicable/ don't know

51. In terms of Previewing and Selecting Potential Training Areas, the intern:

☐ ***did not*** preview potential training areas or was ***unable*** to select appropriate lesson locations based on the objectives of the lessons.

☐ previewed potential training areas and ***inconsistently*** selected lesson locations based on the lesson objectives and the level of the student/client.

☐ ***consistently*** selected lesson locations that were based on the lesson objectives and ***sometimes*** demonstrated attention to the level of the student/client.

☐ ***always*** selected lesson locations that allowed for both meeting the lesson objectives and attended to the level of the student/client.

☐ Not applicable/ don't know

52. In terms of Developing Individualized Lessons based on the students'/clients' abilities, needs, and/or learning styles, the intern:

☐ was ***unable*** to design lessons that were suitable to the lesson objectives or appropriate for the students/clients.

☐ ***inconsistently*** designed lessons that were suitable to lesson objectives or appropriate for the students/clients.

☐ ***consistently*** designed lessons that were suitable to the lesson objectives and ***mostly*** appropriate for the students/clients.

☐ ***always*** designed creative lessons that were ***specially tailored*** to meet the lesson objectives ***and*** the individual students/clients.

☐ Not applicable/ don't know

53. In terms of Considering Instructional Materials and Appropriate Devices, the intern:

☐ ***did not*** consider materials to support instruction ***or*** chose materials and devices that were ***inappropriate*** for the instructional goals.

☐ ***inconsistently recognized*** the need for materials and devices to support instruction ***or inconsistently*** chose appropriate materials and devices that supported the instructional goals from resources that were available.

☐ ***consistently recognized*** the need for materials and devices to support instruction ***and*** chose ***appropriate*** materials and devices from resources that were available.

☐ ***always recognized*** the need for materials and devices to support instruction ***and*** used creativity in ***customizing or procuring*** the materials and devices when available resources did not match the need.

☐ Not applicable/ don't know

54. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?
If you select "yes", use the textbox below to clarify which competency skill(s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

COMPETENCY DOMAIN 4: Instruction

This competency domain measures the intern's ability to effectively teach and reinforce the following elements of O&M instruction across a range of environments: concepts related to independent movement and orientation; mobility technique; orientation skills; use of low vision in maintaining safe and independent movement and orientation; and use of remaining senses in maintaining safe and independent movement and orientation.

Please select the **BEST** answer.

55. In terms of Sequencing of Lessons based on an understanding of prerequisite knowledge important for learning skills and concepts, the intern:

☐ ***did not*** demonstrate an understanding of prerequisite knowledge; ***therefore***, the progression of lessons was ***not*** appropriately sequential.

☐ ***inconsistently*** planned lessons that reflected an understanding of prerequisite knowledge, ***therefore***, the progression of lessons was ***sometimes*** sequential.

☐ ***consistently*** planned lessons that reflected understanding of prerequisite knowledge, ***therefore***, lessons were sequential, ***but not*** based on the individual students'/clients' past performances or needs.

☐ ***actively*** built on knowledge of prerequisite relationships among the skills and concepts when designing ***all*** lessons ***and always*** demonstrated attention to the students'/ clients' past performances or needs when sequencing lessons.

☐ Not applicable/ don't know

56. In terms of Teaching Use of Low Vision based on an accurate understanding of the students/clients residual vision and expected changes, the intern:

☐ ***did not*** choose ***appropriate*** strategies for students/clients.

☐ ***inconsistently*** chose ***appropriate*** strategies for students/clients.

☐ ***consistently*** chose ***appropriate*** strategies for students/clients ***but was unable*** to explain the rationale behind the strategies specific to the individual students'/clients' vision.

☐ ***always*** chose ***appropriate*** strategies for students/clients ***and was able*** to articulate the rationale behind the strategies specific to the individual students'/clients' vision.

☐ Not applicable/ don't know

57. In terms of Teaching Use of Other Senses based on an accurate understanding of the students/clients abilities, the intern:

☐ ***did not*** choose ***appropriate*** strategies for students/clients.

☐ ***inconsistently*** chose ***appropriate*** strategies for students/clients.

☐ ***consistently*** chose ***appropriate*** strategies for students/clients ***but was unable*** to explain the rationale behind the strategies specific to the individual students/clients.

☐ ***always*** chose ***appropriate*** strategies for students/clients ***and was able*** to articulate the rationale behind the strategies specific to the individual students/clients.

☐ Not applicable/ don't know

58. In terms of explaining, teaching, or reviewing the components of Human Guide Techniques, the intern:

☐ made ***significant*** errors in ***accuracy, appropriateness, or detail.***

☐ was ***inconsistently*** accurate, appropriate, or detailed.

☐ was ***consistently*** accurate, appropriate, and detailed ***but was unable*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ was ***always*** accurate, appropriate, and detailed ***and was able*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ Not applicable/ don't know

59. In terms of explaining, teaching, or reviewing the components of Cane Techniques, the intern:

☐ made ***significant*** errors in ***accuracy, appropriateness, or detail.***

☐ was ***inconsistently*** accurate, appropriate, or detailed.

☐ was ***consistently*** accurate, appropriate, and detailed ***but was unable*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ was ***always*** accurate, appropriate, and detailed ***and was able*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ Not applicable/ don't know

60. In terms of explaining, teaching, or reviewing the components of prerequisite, basic, or advanced Orientation Skills, the intern:

☐ made ***significant*** errors in ***accuracy, appropriateness, or detail.***

☐ was ***inconsistently*** accurate, appropriate, or detailed.

☐ was ***consistently*** accurate, appropriate, and detailed ***but was unable*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ was ***always*** accurate, appropriate, and detailed ***and was able*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ Not applicable/ don't know

61. In terms of explaining, teaching, or reviewing the components of travel in Complex Environments, the intern:

☐ made ***significant*** errors in ***accuracy, appropriateness, or detail.***

☐ was ***inconsistently*** accurate, appropriate, or detailed.

☐ was ***consistently*** accurate, appropriate, and detailed ***but was unable*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ was ***always*** accurate, appropriate, and detailed ***and was able*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ Not applicable/ don't know

62. In terms of explaining, teaching, or reviewing the components of Street Crossings, the intern:

☐ made ***significant*** errors in ***accuracy, appropriateness, or detail.***

☐ was ***inconsistently*** accurate, appropriate, or detailed.

☐ was ***consistently*** accurate, appropriate, and detailed ***but was unable*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ was ***always*** accurate, appropriate, and detailed ***and was able*** to tailor the standard techniques to meet the individual students'/clients' needs.

63. In terms of explaining, teaching, or reviewing the components of skills used with Public Transportation, the intern:

☐ made ***significant*** errors in ***accuracy, appropriateness, or detail.***

☐ was ***inconsistently*** accurate, appropriate, or detailed.

☐ was ***consistently*** accurate, appropriate, and detailed ***but was unable*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ was ***always*** accurate, appropriate, and detailed ***and was able*** to tailor the standard techniques to meet the individual students'/clients' needs.

☐ Not applicable/ don't know

64. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?
If you select "yes", use the textbox below to clarify which competency skill(s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

65. In terms of Using Instructional Strategies based on the students/clients, environments, and/or objectives of the lessons, the intern:

☐ ***did not*** select or implement ***appropriate*** instructional strategies.

☐ ***inconsistently*** selected or implemented ***appropriate*** instructional strategies.

☐ ***consistently*** selected or implemented ***appropriate*** instructional strategies.

☐ ***always*** selected or implemented ***appropriate*** instructional strategies ***and was able*** to articulate the rationale behind the strategies.

☐ Not applicable/ don't know

66. In terms of Communicating During Lessons with students/clients in regard to instructions and/or discussions*, the intern's communication was:*

☐ ***not clear*** and ***did not*** contain the ***appropriate*** level of detail for the student/client and situation.

☐ ***inconsistently*** clear or contained an ***inappropriate*** level of detail for the student/client and situation.

☐ ***consistently*** clear and contained an ***appropriate*** level of detail for the student/client and situations ***but*** it was ***not sustained throughout*** the entire lesson.

☐ ***always*** clear and contained an ***appropriate*** level of detail for the student/client and situation ***and*** it was ***sustained throughout*** the entire lesson.

☐ Not applicable/ don't know

67. In terms of Managing the Lessons, the intern:

☐ was ***not able*** to keep the students/clients focused on the objectives or maintain control of the lessons.

☐ ***inconsistently*** kept the students/clients focused on the objectives ***or*** the pace of the lessons was too slow or too hurried.

☐ ***consistently*** kept the students/clients focused on the objectives and paced ***most*** of the lessons ***appropriately*** based on the individual needs of the students/clients.

☐ ***always*** kept ***all*** students/clients focused on the objectives and paced ***all*** lessons ***appropriately*** based on the individual needs of the students/clients.

☐ Not applicable/ don't know

68. In terms of Modifying Lessons based on the situation or the students/clients needs or input, the intern:

☐ ***did not recognize*** when modifications to the lessons were necessary.

☐ ***inconsistently*** recognized when modifications were necessary ***or*** was ***flustered or unsuccessful*** in modifying the lessons.

☐ ***consistently*** recognized when modifications were necessary ***and most*** of the time was ***successful*** in modifying the lessons ***appropriately***.

☐ ***always*** recognized when modifications were necessary ***and*** modified the lessons with ***ease and success***.

☐ Not applicable/ don't know

69. In terms of Providing Feedback to Students/Clients based on their individual needs and cognitive levels, the intern:

☐ ***did not*** provide ***appropriate, accurate, or timely*** feedback.

☐ ***inconsistently*** provided appropriate, accurate, or timely feedback.

☐ ***consistently*** provided appropriate, accurate, and/or timely feedback.

☐ ***always*** provided appropriate, accurate, and timely feedback.

☐ Not applicable/ don't know

70. In terms of Gauging Acquisition of Skills, the intern was:

☐ ***unable*** to gauge whether students/clients ***understood the skills and their application***, and therefore, was ***inaccurate in judging*** whether the students/clients were ready to move onto the next skill.

☐ ***inconsistently*** able to gauge whether students/clients understood the skills and their application, and therefore, was ***sometimes inaccurate*** in judging whether the students/clients were ready to move onto the next skill.

☐ ***consistently*** able to gauge whether students/clients understood the skills and their application, and therefore, was ***mostly accurate*** in judging whether the students/clients were ready to move onto the next skill.

☐ ***always*** able to gauge whether students/clients understood the skills and their applications, and therefore, was ***always*** accurate in judging whether the students/clients were ready to move onto the next skill.

☐ Not applicable/ don't know

71. In terms of Reflecting on Teaching, the intern's comments on the success of the lessons were:

☐ inappropriate, inaccurate, or ***not*** insightful.

☐ ***inconsistently*** appropriate, accurate, ***or*** insightful.

☐ ***consistently*** appropriate, accurate, ***and/or*** insightful.

☐ ***always*** appropriate, accurate, ***and*** insightful.

☐ Not applicable/ don't know

72. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?

If you select "yes", use the textbox below to clarify which competency skill(s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

COMPETENCY DOMAIN 5: Monitoring and Safety

This competency domain measures the intern's ability to effectively monitor orientation and mobility skills, recognize potentially dangerous situations, and intervene as appropriate to ensure student safety.

Please select the **BEST** answer.

73. In terms of visually and/or auditorily Monitoring O&M Skills, the intern:

☐ ***did not*** actively monitor the students'/clients' skills or the environment for safety reasons.

☐ monitored the students'/clients skills ***or*** the environment for safety reasons, ***but not both***.

☐ monitored the students'/clients skills ***and*** the environment for safety reasons ***throughout most*** of the lessons.

☐ ***always*** monitored the students'/clients skills and the environment for safety reasons ***throughout all*** lessons.

☐ Not applicable/ don't know

74. In terms of Positioning During Lessons, the intern was:

☐ ***not*** correctly positioned during the lessons.

☐ ***inconsistently*** positioned correctly throughout the lessons based on the students'/clients' skill level.

☐ ***consistently*** positioned correctly throughout most lessons based on the students'/clients' skill level.

☐ ***always*** positioned correctly throughout all lessons based on the students'/clients' skill level.

☐ Not applicable/ don't know

75. In terms of Recognizing Potentially Dangerous Situations, the intern:

☐ ***did not*** recognize potentially dangerous situations during lessons.

☐ ***inconsistently*** recognized potentially dangerous situations ***but did not*** position himself/herself ***quickly*** enough to intervene ***appropriately***.

☐ ***consistently*** recognized potentially dangerous situations ***and usually*** positioned himself/herself quickly enough to intervene ***appropriately***.

☐ ***always*** recognized potentially dangerous situations in ***ample time*** to ***ensure*** the students'/clients' ***safety*** and ***position*** himself/herself to ***appropriately*** intervene.

☐ Not applicable/ don't know

76. In terms of Intervening due to students'/clients' frustration, disorientation, or for safety reasons, the intern:

☐ ***did not*** recognize when it was the ***appropriate*** time to intervene or ***responded inappropriately*** based on the students'/clients' skill level or emotional state.

☐ ***inconsistently*** recognized when it was the ***appropriate*** time to intervene ***and/or inconsistently*** responded appropriately based on the students'/clients' skill level or emotional state.

☐ ***consistently*** recognized when it was the ***appropriate*** time to intervene ***and consistently*** responded appropriately based on the students'/clients' skill level or emotional state.

☐ ***always*** recognized when it was the ***appropriate*** time to intervene ***and always*** responded appropriately based on the students'/clients' skill level or emotional state.

☐ Not applicable/ don't know

77. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?

If you select "yes", use the textbox below to clarify which competency skill (s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

COMPETENCY DOMAIN 5: Facilitating Independence

This competency domain measures the intern's ability to facilitate student independence and problem solving ability across a variety of travel situations and environments.

Please select the **BEST** answer.

78. In terms of Promoting Participation based on the students'/clients' skills or cognitive levels, the intern:

☐ ***did not*** promote students'/clients' participation or input.

☐ ***promoted*** students'/clients' participation or input, ***but*** the ***expectations*** for participation were ***not appropriate*** for the individual students/clients.

☐ ***consistently*** promoted students'/clients' participation or input ***and*** expectations for participation were appropriate ***most*** of the time for the individual students/clients.

☐ ***always*** promoted students'/clients' participation or input ***and*** expectations for participation were ***always*** appropriate for the individual students/clients.

☐ Not applicable/ don't know

79. In terms of Fostering Self-Assessment Skills by assisting students/clients to accurately reflect on what they learned and what areas still needed improvement, the intern:

☐ ***did not*** assist students/clients in developing self-assessment skills.

☐ ***attempted*** to assist students/clients in developing self-assessment skills ***but*** the ***level of assistance*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.

☐ ***consistently*** assisted students/clients in developing self-assessment skills ***and*** the ***level of assistance*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.

☐ ***always*** assisted students/clients in developing self-assessment skills ***and*** the ***level of assistance*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.

☐ Not applicable/ don't know

80. In terms of Fostering Self-Advocacy Skills by encouraging students/clients to communicate their individual needs and rights, the intern:

☐ ***did not*** foster self-advocacy skills and constantly interfered when students/clients had a need to interact with the public.

☐ ***attempted*** to foster self-advocacy skills, ***but*** the ***level of involvement*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.

☐ ***consistently fostered*** self-advocacy skills ***and*** the ***level of involvement*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.

☐ ***always*** fostered self-advocacy skills ***and*** the ***level of involvement*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.

☐ Not applicable/ don't know

81. In terms of Facilitating Problem Solving Skills by assisting students/clients to recognize when problems arise and to chose an appropriate solution to resolve the problem, the intern:

☐ ***did not*** facilitate problem solving skills and constantly provided the solutions when problems arose.

☐ ***attempted*** to facilitate problem solving skills ***but*** the ***level of facilitation*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.

☐ ***consistently*** facilitated problem solving skills ***and*** the ***level of facilitation*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.

☐ ***always*** facilitated problem solving skills ***and*** the ***level of facilitation*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.

☐ Not applicable/ don't know

82. In terms of Facilitating Decision Making Skills by assisting students/clients to determine which O&M techniques would be best used in certain environmental conditions, the intern:

☐ ***did not*** facilitate such decision making skills.

☐ ***attempted*** to facilitate such decision making skills ***but*** the ***level of facilitation*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.

☐ ***consistently*** facilitated such decision making skills ***and*** the ***level of facilitation*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.

☐ ***always*** facilitated such decision making skills ***and*** the ***level of facilitation*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.

☐ Not applicable/ don't know

83. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?

If you select "yes", use the textbox below to clarify which competency skill (s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

COMPETENCY DOMAIN 7: Professionalism

This competency domain measures the intern's ability to demonstrate professional conduct consistent with the Code of Ethics for O&M specialists, find and access appropriate resources, keep on-time scheduling, and follow and maintain appropriate record keeping and reporting procedures.

Please select the **BEST** answer.

84. In terms of Maintaining Professional Conduct as defined in the ACVREP Code of Ethics for O&M Specialists, the intern:

☐ ***did not*** maintain the standards of acceptable behavior.

☐ ***inconsistently*** maintained some of the standards of acceptable behavior.

☐ ***consistently*** maintained ***most*** of the standards of acceptable behavior.

☐ ***always*** maintained ***all*** of the standards of acceptable behavior.

☐ Not applicable/ don't know

85. In terms of Utilizing Resources, the intern:

☐ ***did not*** utilize resources available within the internship setting in order to improve practice.

☐ ***sometimes*** utilized resources limited to the internship setting in order to improve practice.

☐ ***consistently*** utilized resources available within the internship setting ***and occasionally*** accessed resources available through local, regional, or national professional organizations in order to improve practice.

☐ ***always*** utilized resources available within the internship setting ***as well as*** resources available through local, regional, and national professional organizations in order to improve practice.

☐ Not applicable/ don't know

86. In terms of Scheduling, the intern:

☐ ***did not*** accurately match lesson time blocks with the abilities and limitations of students/clients or travel time needed.

☐ was ***inconsistently*** accurate in matching lesson time blocks with the abilities and limitations of students/clients or travel time needed.

☐ was ***consistently*** accurate in matching lesson time blocks with the abilities and limitations of students/clients and/or travel time needed.

☐ was ***always*** accurate in matching lesson time blocks with the abilities and limitations of students/clients and/or travel time needed.

☐ Not applicable/ don't know

87. In terms of maintaining appropriate Record Keeping and Reporting Procedures, the intern's records and reports were:

☐ ***not*** kept up-to-date, were inaccurate, or lacked sufficient detail.

☐ ***inconsistently*** kept up-to-date, accurate, or sufficiently detailed.

☐ ***consistently*** kept up-to-date, accurate, and contained sufficient detail.

☐ ***always*** up-to-date, accurate, sufficiently detailed ***and*** included data for decision making purposes.

☐ Not applicable/ don't know

88. Did you have difficulty choosing a response for any of the competency skills on THIS page (either because you found it difficult to reflect on the intern's performance or because it was difficult to choose only one response)?

If you select "yes", use the textbox below to clarify which competency skill (s) and provide your related comments.

☐ No

☐ Yes

Textbox: If yes, please indicate which competency skill(s) and explain

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SECTION 5

You are almost finished with the survey. The next few pages will ask you some questions about the new O&M Clinical Competency Evaluation Matrix.

Again, your participation in this study is VERY important and I thank you for your time.

89. Under the COMMUNICATION AND PROFESSIONAL RELATIONSHIPS domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Establishing Rapport	☐	☐	☐	☐
Orally Communicating with Clients	☐	☐	☐	☐
Orally Communicating with Families	☐	☐	☐	☐
Orally Communicating with Colleagues	☐	☐	☐	☐
Orally Communicating with Supervisors	☐	☐	☐	☐
Written Communication	☐	☐	☐	☐

90. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

91. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

92. Under the O&M ASSESSMENT domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Planning O&M Assessments	☐	☐	☐	☐
Conducting O&M Assessments	☐	☐	☐	☐
Synthesizing Findings in a Written Report	☐	☐	☐	☐
Orally Communicating Results	☐	☐	☐	☐

93. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

94. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

95. Under the INSTRUCTIONAL PLANNING domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Knowing Options for Mobility Systems	☐	☐	☐	☐
Reviewing and Interpreting Relevant Records	☐	☐	☐	☐
Choosing Appropriate Goals	☐	☐	☐	☐
Writing Appropriate Behavioral Objectives	☐	☐	☐	☐
Previewing and Selecting Potential Training Areas	☐	☐	☐	☐
Developing Individualized Lessons	☐	☐	☐	☐
Considering Instructional Materials And Appropriate Devices	☐	☐	☐	☐
Sequencing of Lessons	☐	☐	☐	☐

96. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

97. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

98. Under the INSTRUCTION domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Teaching Use of Low Vision	☐	☐	☐	☐
Teaching Use of Other Senses	☐	☐	☐	☐
Human Guide Techniques	☐	☐	☐	☐
Cane Techniques	☐	☐	☐	☐
Orientation Skills	☐	☐	☐	☐
Complex Travel Environments	☐	☐	☐	☐
Street Crossings	☐	☐	☐	☐
Public Transportation	☐	☐	☐	☐

99. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

100. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

101. Under the INSTRUCTION domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Using Instructional Strategies	☐	☐	☐	☐
Communicating During Lessons	☐	☐	☐	☐
Managing the Lessons	☐	☐	☐	☐
Modifying Lessons	☐	☐	☐	☐
Providing Feedback to Students/Clients	☐	☐	☐	☐

Gauging Acquisition of Skills	☐	☐	☐	☐
Reflecting on Teaching	☐	☐	☐	☐

102. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

103. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

104. Under the MONITORING AND SAFETY domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential/	Somewhat essential/	Essential/	Absolutely essential
Monitoring O&M Skills	☐	☐	☐	☐
Positioning During Lessons	☐	☐	☐	☐
Recognizing Potentially Dangerous Situations	☐	☐	☐	☐
Intervening	☐	☐	☐	☐

105. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

106. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

107. Under the FACILITATING INDEPENDENCE domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Promoting Participation	☐	☐	☐	☐
Fostering Self-Assessment	☐	☐	☐	☐
Fostering Self-Advocacy Skills	☐	☐	☐	☐
Facilitating Problem Solving Skills	☐	☐	☐	☐
Facilitating Decision Making Skills	☐	☐	☐	☐

108. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

109. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

110. Under the PROFESSIONALISM domain, how essential are each of these competencies in demonstrating clinical competence in O&M?

	Not essential	Somewhat essential	Essential	Absolutely essential
Maintaining Professional Conduct	☐	☐	☐	☐
Utilizing Resources	☐	☐	☐	☐
Scheduling	☐	☐	☐	☐
Record Keeping and Reporting Procedures	☐	☐	☐	☐

111. When reviewing this list of competency skills, are there any skills missing under this domain that you feel should be added?

☐ No

☐ Yes

If yes, what skills should be added?

112. Do you have any additional comments regarding these competency skills or the performance levels for this domain?

☐ No

☐ Yes

If yes, please provide comments:

These last few questions pertain to the overall format of the O&M CCEM.

113. Do you feel the 4 performance level format is appropriate to assess the clinical competencies of O&M interns?

☐ Yes

☐ No

If no, what format would you recommend?

114. Would you consider using this evaluation tool as a means to assessing the clinical competencies of your O&M interns?

☐ Yes

☐ No

Additional comments

Thank you for completing this survey. Your participation is appreciated! Once you click "DONE", you will be redirected to a separate web page that will ask for your name and email address and for you to indicate whether you are interested in receiving a **guaranteed $20** debit card **OR** entering your name into a **drawing for a $300** debit card. For the drawing, one participant's name will be drawn from all entries and the person will be notified via email. Again, this information will not be connected to your responses.

APPENDIX L

O&M CLINICAL COMPETENCY EVALUATION MATRIX

Introduction

The Orientation and Mobility Clinical Competency Evaluation Matrix (O&M CCEM) was originally designed to assess the clinical competency skills of O&M interns. It is recommended that the tool be used to assess the intern's clinical competencies not only at the completion of the internship but throughout the internship.

Instructions

The O&M CCEM assesses 44 competency skills within three dimensions: Standard Teaching Skills, O&M Specific Skills, and Advanced O&M Instruction. Scores on each dimension should be calculated.

Performance levels are provided in order to determine the level of competency.
The performance levels are *generally* defined as follows:
A *Score 1* rating is given if the individual does not demonstrate the skill.
A Score *2* rating is given if the individual attempts to implement the skill but inconsistently demonstrates some of its components.
A *Score 3* rating is given if the individual consistently demonstrates all of the components of the skill but has not mastered it.
A *Score 4* rating is given if the individual demonstrates all components of the skill with mastery.

It is important that you read all of the performance levels for each competency skill before making your choice. If the O&M intern only partially meets the competencies within a specific performance level, select the lower performance level. Be sure to select one level of performance for each competency skill. It is important that the internship experience provides the opportunity for the intern to demonstrate ALL of the competency skills.

O&M Intern: _____ Clinical Supervisor: _____

Total number of internship hours completed: _____ Dates of Internship: _____

Internship Setting: Please select all that apply:

___ Early Intervention Program
___ Public School Setting
___ Other, please explain_____
___ Specialized School for the Blind
___ Adult Rehabilitation Agency (Private, Public, VA)

Dimension 1: Standard Teaching Skills

Competency Skill	Levels of Performance			
	Score: 1	**Score: 2**	**Score :3**	**Score: 4**
In terms of **Establishing Rapport** by showing respect, thoughtfulness, patience, understanding, and empathy, the intern:	☐ was ***unable*** to relate to students/clients or families.	☐ ***attempted*** to relate to ***some*** students/clients or families	☐ ***consistently attempted*** to relate to ***all*** students/clients and families.	☐ ***always*** demonstrated an ability to ***comfortably*** relate to ***all*** students/clients and families.
In terms of **Orally Communicating with Students/Clients**, the intern's interactions with students/clients were:	☐ ***negative, demeaning, or inappropriate*** based on the ages, abilities, or cultural backgrounds of the students/clients.	☐ ***generally*** friendly and personable ***but*** reflected ***inconsistencies or disregard*** for students'/clients' ages, abilities, or cultural backgrounds.	☐ ***friendly*** and demonstrated ***general*** warmth, caring, and respect with a ***consistent attempt*** to consider the students'/clients' ages, abilities, and cultural backgrounds.	☐ ***always*** genuine, caring, respectful, ***and*** appropriate based on students'/clients' ages, abilities, and cultural backgrounds.
In terms of **Orally Communicating with Families**, the intern's communication with families was:	☐ ***rare or nonexistent***, or responses were ***insensitive*** to families' concerns. .	☐ initiated only after ***families*** requested ***or*** responses to families' concerns were ***minimal*** but usually showed a ***basic*** level of sensitivity.	☐ initiated by the ***intern*** or responses to concerns were ***somewhat*** thorough and ***consistently*** showed a basic level of sensitivity.	☐ ***frequent***, ***thorough***, and handled with ***great*** sensitivity. In addition, the intern went above and beyond to provide additional information.
In terms of **Orally Communicating with Team Members**, the intern's relationships with team members/colleagues were:	☐ negative, passive, ***or*** unconstructive.	☐ ***cordial*** in order to fulfill the duties that the school/agency required.	☐ supportive, cooperative, ***and*** collaborative.	☐ supportive, cooperative, and collaborative ***and*** the intern took initiative in assuming a leadership role.
In terms of **Orally Communicating with Supervisors**, the intern demonstrated:	☐ ***little*** or ***no*** respect for authority and/or did ***not*** initiate interactions with the supervisor in order to seek advice.	☐ a ***basic*** level of respect for authority and/or ***occasionally*** initiated interactions with the supervisor, ***but*** contributions in those interactions were minimal.	☐ ***respect*** for authority, ***consistently*** initiated interactions with supervisor, and ***occasionally*** contributed to the interactions by asking basic, appropriate questions.	☐ ***constant*** respect for authority, ***frequently*** initiated interactions with supervisor, and ***fully*** contributed to the interactions by asking insightful and appropriate questions.

In terms of **Planning O&M Assessments** and knowing the components of the assessment, such as conducting interviews, reviewing records, selecting appropriate assessment tools and environments based on the student/client, and planning appropriate activities, the intern was:	☐ ***unaware*** of the components for planning O&M assessments and ***unable*** to plan appropriate activities.	☐ aware of ***some*** of the basic components for planning O&M assessments, but demonstrated ***little attempt*** to plan appropriate activities within those components.	☐ aware of ***all*** of the components for planning O&M assessments and demonstrated an attempt to plan ***appropriate*** activities within ***some*** of those components.	☐ knowledgeable of ***all*** the components for planning O&M assessments and ***comprehensively*** planned appropriate activities within ***all*** the components.
In terms of **Conducting O&M Assessments**, the intern:	☐ was ***unable*** to make relevant observations and ***rarely*** asked appropriate questions to gather additional information from the students/clients during the O&M assessments.	☐ ***inconsistently*** made relevant observations and ***occasionally*** asked appropriate questions, ***but*** the O&M assessments were executed in an apparent random, segmented format.	☐ ***consistently*** made relevant observations, gathered information using ***general*** questions, and conducted the O&M assessments with ***some fluidity*** across components.	☐ executed ***all*** components of the O&M assessments ***seamlessly*** while making ***keen*** observations and asking ***specific*** questions to gather additional information.
In terms of **Synthesizing Findings in a Written Report**, the intern:	☐ was ***unable*** to generate reports that ***coherently and accurately*** explained the O&M assessment results.	☐ ***inconsistently*** generated reports that ***coherently and accurately*** explained the O&M assessment results ***and*** made ***general*** O&M recommendations that were ***not necessarily*** linked to the O&M assessment results.	☐ ***consistently*** generated reports that ***coherently and accurately*** explained the O&M assessment results and made ***some*** O&M recommendations linked to O&M assessment results.	☐ ***always*** generated reports that were ***coherent, accurate, and detailed***. In addition, the intern was able to ***synthesize all*** of the results to formulate O&M recommendations related to ***all*** areas assessed.
In terms of **Knowing Options for Mobility Systems** such as human guide, long cane and the various types, adaptive mobility devices, dog guide, and electronic travel devices, the intern:	☐ was ***unaware*** of the range of mobility system options available ***or did not*** provide recommendations to students/clients and/or families.	☐ was ***aware*** of the range of mobility system options ***but sometimes*** articulated ***inaccurate*** information or provided an ***inappropriate*** recommendations to students/clients and/or families.	☐ was ***fully aware*** of mobility system options and articulated ***accurate*** information when providing an ***appropriate*** recommendations to students/clients and/or families.	☐ displayed ***extensive*** knowledge of mobility systems and was ***adept*** at understanding students/clients and/or families perspectives and in engaging students/clients and/or families in making an informed and appropriate decision for themselves.

In terms of **Reviewing and Interpreting Relevant Records**, the intern:	☐ ***did not*** review ***all*** relevant records and reports when planning O&M instruction ***or was unable*** to interpret the reports for use in instructional planning.	☐ reviewed ***some*** relevant records and reports when planning instruction and ***inconsistently*** interpreted information at a ***basic*** level to determine instructional areas.	☐ reviewed ***all*** relevant records and reports and ***consistently*** interpreted the information at a ***basic*** level to determine instructional areas and starting points for instruction within ***some*** of those areas.	☐ ***accurately synthesized*** at a deeper level ***all*** relevant records and reports when determining instructional areas and starting points for instruction within ***all*** those areas.
In terms of **Choosing Appropriate Goals**, the intern:	☐ chose lesson goals that were ***not clear, specific, or appropriate*** based on the students/clients needs.	☐ ***inconsistently*** chose lesson goals that were ***clear, specific or appropriate*** based on the students'/clients' needs.	☐ ***consistently*** chose lesson goals that were ***clear, specific and appropriate*** based on the students'/clients' needs.	☐ ***always*** chose goals that are ***clear, specific, and appropriate*** based on the students'/clients' needs ***and*** also ***explicitly engaged*** students/clients and/or families in the goal making process.
In terms of **Writing Appropriate Behavioral Objectives**, the intern:	☐ ***did not*** write behavioral objectives that were ***clear or related*** to the goal of the lessons.	☐ ***inconsistently*** wrote ***general*** behavioral objectives that ***related*** to the goal of the lessons ***but*** objectives either ***lacked detail*** regarding the specific components needed to achieve the goal or ***were not*** measureable.	☐ ***consistently*** wrote behavioral objectives that were ***clear*** and reflected the ***breakdown of specific*** components needed to achieve the goal ***but some*** objectives are ***not*** measureable.	☐ ***always*** wrote behavioral objectives that were clear, reflected the breakdown of the specific components, ***and*** were measureable.
In terms of **Previewing and Selecting Potential Training Areas**, the intern:	☐ ***did not*** preview potential training areas or was ***unable*** to select appropriate lesson locations based on the objectives of the lessons.	☐ previewed potential training areas and ***inconsistently*** selected lesson locations based on the lesson objectives and the level of the student/client.	☐ ***consistently*** selected lesson locations that were based on the lesson objectives and ***sometimes*** demonstrated attention to the level of the student/client.	☐ ***always*** selected lesson locations that allowed for both meeting the lesson objectives and attended to the level of the student/client.
In terms of **Developing Individualized Lessons** based on the students'/clients' abilities, needs, and/or learning styles, the intern:	☐ was ***unable*** to design lessons that were suitable to the lesson objectives or appropriate for the students/clients.	☐ ***inconsistently*** designed lessons that were suitable to lesson objectives or appropriate for the students/clients.	☐ ***consistently*** designed lessons that were suitable to the lesson objectives and ***mostly*** appropriate for the students/clients.	☐ ***always*** designed creative lessons that were ***specially tailored*** to meet the lesson objectives ***and*** the individual students/clients.

In terms of **Considering Instructional Materials and Appropriate Devices**, the intern:	☐ ***did not*** consider materials to support instruction ***or*** chose materials and devices that were ***inappropriate*** for the instructional goals.	☐ ***inconsistently recognized*** the need for materials and devices to support instruction ***or inconsistently*** chose appropriate materials and devices that supported the instructional goals from resources that were available.	☐ ***consistently recognized*** the need for materials and devices to support instruction ***and*** chose ***appropriate*** materials and devices from resources that were available.	☐ ***always recognized*** the need for materials and devices to support instruction ***and*** used creativity in ***customizing or procuring*** the materials and devices when available resources did not match the need.
In terms of **Sequencing of Lessons** based on an understanding of prerequisite knowledge important for learning skills and concepts, the intern:	☐ ***did not*** demonstrate an understanding of prerequisite knowledge; ***therefore***, the progression of lessons was ***not*** appropriately sequential.	☐ ***inconsistently*** planned lessons that reflected an understanding of prerequisite knowledge, ***therefore***, the progression of lessons was ***sometimes*** sequential.	☐ ***consistently*** planned lessons that reflected understanding of prerequisite knowledge, ***therefore***, lessons were sequential, ***but not*** based on the individual students'/clients' past performances or needs.	☐ ***actively*** built on knowledge of prerequisite relationships among the skills and concepts when designing ***all*** lessons ***and always*** demonstrated attention to the students'/ clients' past performances or needs when sequencing lessons.
In terms of **Using Instructional Strategies** based on the students/clients, environments, and/or objectives of the lessons, the intern:	☐ ***did not*** select or implement ***appropriate*** instructional strategies.	☐ ***inconsistently*** selected or implemented ***appropriate*** instructional strategies.	☐ ***consistently*** selected or implemented ***appropriate*** instructional strategies.	☐ ***always*** selected or implemented ***appropriate*** instructional strategies ***and was able*** to articulate the rationale behind the strategies.
In terms of **Communicating During Lessons** with students/clients in regard to instructions and/or discussions, the intern's communication was:	☐ ***not clear*** and ***did not*** contain the ***appropriate*** level of detail for the student/client and situation.	☐ ***inconsistently*** clear or contained an ***inappropriate*** level of detail for the student/client and situation.	☐ ***consistently*** clear and contained an ***appropriate*** level of detail for the student/client and situations ***but*** it was ***not sustained throughout*** the entire lesson.	☐ ***always*** clear and contained an ***appropriate*** level of detail for the student/client and situation ***and*** it was ***sustained throughout*** the entire lesson.
In terms of **Managing the Lessons**, the intern:	☐ was ***not able*** to keep the students/clients focused on the objectives or maintain control of the lessons.	☐ ***inconsistently*** kept the students/clients focused on the objectives ***or*** the pace of the lessons was too slow or too hurried.	☐ ***consistently*** kept the students/clients focused on the objectives and paced ***most*** of the lessons ***appropriately*** based on the individual needs of the students/clients.	☐ ***always*** kept ***all*** students/clients focused on the objectives and paced ***all*** lessons ***appropriately*** based on the individual needs of the students/clients.

In terms of **Modifying Lessons** based on the situation or the students/clients needs or input, the intern:	☐ ***did not recognize*** when modifications to the lessons were necessary.	☐ ***inconsistently*** recognized when modifications were necessary ***or*** was ***flustered or unsuccessful*** in modifying the lessons.	☐ ***consistently*** recognized when modifications were necessary ***and most*** of the time was ***successful*** in modifying the lessons ***appropriately***.	☐ ***always*** recognized when modifications were necessary ***and*** modified the lessons with ***ease and success***.
In terms of **Providing Feedback** to Students/Clients based on their individual needs and cognitive levels, the intern:	☐ ***did not*** provide ***appropriate, accurate, or timely*** feedback.	☐ ***inconsistently*** provided appropriate, accurate, or timely feedback.	☐ ***consistently*** provided appropriate, accurate, and/or timely feedback.	☐ ***always*** provided appropriate, accurate, and timely feedback.
In terms of **Gauging Acquisition of Skills**, the intern was:	☐ ***unable*** to gauge whether students/clients ***understood the skills and their application***, and therefore, was ***inaccurate in judging*** whether the students/clients were ready to move onto the next skill.	☐ ***inconsistently*** able to gauge whether students/clients understood the skills and their application, and therefore, was ***sometimes inaccurate*** in judging whether the students/clients were ready to move onto the next skill.	☐ ***consistently*** able to gauge whether students/clients understood the skills and their application, and therefore, was ***mostly accurate*** in judging whether the students/clients were ready to move onto the next skill.	☐ ***always*** able to gauge whether students/clients understood the skills and their applications, and therefore, was ***always*** accurate in judging whether the students/clients were ready to move onto the next skill.
In terms of **Reflecting on Teaching,** the intern's comments on the success of the lessons were:	☐ inappropriate, inaccurate, or ***not*** insightful.	☐ ***inconsistently*** appropriate, accurate, ***or*** insightful.	☐ ***consistently*** appropriate, accurate, ***and/or*** insightful.	☐ ***always*** appropriate, accurate, ***and*** insightful.
In terms of **Maintaining Professional Conduct** as defined in the ACVREP Code of Ethics for O&M Specialists, the intern:	☐ ***did not*** maintain the standards of acceptable behavior.	☐ ***inconsistently*** maintained some of the standards of acceptable behavior.	☐ ***consistently*** maintained ***most*** of the standards of acceptable behavior.	☐ ***always*** maintained ***all*** of the standards of acceptable behavior.
In terms of **Utilizing Resources**, the intern:	☐ ***did not*** utilize resources available within the internship setting in order to improve practice.	☐ ***sometimes*** utilized resources limited to the internship setting in order to improve practice.	☐ ***consistently*** utilized resources available within the internship setting ***and occasionally*** accessed resources available through local, regional, or national professional organizations in order to improve practice.	☐ ***always*** utilized resources available within the internship setting ***as well as*** resources available through local, regional, and national professional organizations in order to improve practice.

In terms of **Scheduling**, the intern:	☐ ***did not*** accurately match lesson time blocks with the abilities and limitations of students/clients or travel time needed.	☐ was ***inconsistently*** accurate in matching lesson time blocks with the abilities and limitations of students/clients or travel time needed.	☐ was ***consistently*** accurate in matching lesson time blocks with the abilities and limitations of students/clients and/or travel time needed.	☐ was ***always*** accurate in matching lesson time blocks with the abilities and limitations of students/clients and/or travel time needed.
In terms of maintaining appropriate **Record Keeping and Reporting Procedures**, the intern's records and reports were:	☐ ***not*** kept up-to-date, were inaccurate, or lacked sufficient detail.	☐ ***inconsistently*** kept up-to-date, accurate, or sufficiently detailed.	☐ ***consistently*** kept up-to-date, accurate, and contained sufficient detail.	☐ ***always*** up-to-date, accurate, sufficiently detailed ***and*** included data for decision making purposes.
Please sum values from the entire Standard Teaching Skills section:	**Column Total _____ (each box is worth 1 point)**	**Column Total _____ (each box is worth 2 points)**	**Column Total _____ (each box is worth 3 points)**	**Column Total _____ (each box is worth 4 points)**

Dimension 1: Standard Teaching Skills Total Score_____

Dimension 2: O&M Specific Skills

Competency Skill	**Levels of Performance**			
	Score: 1	**Score: 2**	**Score :3**	**Score: 4**
In terms of **Teaching Use of Low Vision** based on an accurate understanding of the students/clients residual vision and expected changes, the intern:	☐ ***did not*** choose ***appropriate*** strategies for students/clients.	☐ ***inconsistently*** chose ***appropriate*** strategies for students/clients.	☐ ***consistently*** chose ***appropriate*** strategies for students/clients ***but was unable*** to explain the rationale behind the strategies specific to the individual students'/clients' vision.	☐ ***always*** chose ***appropriate*** strategies for students/clients ***and was able*** to articulate the rationale behind the strategies specific to the individual students'/clients' vision.

In terms of **Teaching Use of Other Senses** based on an accurate understanding of the students/clients abilities, the intern:	☐ ***did not*** choose ***appropriate*** strategies for students/clients.	☐ ***inconsistently*** chose ***appropriate*** strategies for students/clients.	☐ ***consistently*** chose ***appropriate*** strategies for students/clients ***but was unable*** to explain the rationale behind the strategies specific to the individual students'/clients' vision.	☐ ***always*** chose ***appropriate*** strategies for students/clients ***and was able*** to articulate the rationale behind the strategies specific to the individual students/clients.
In terms of explaining, teaching, or reviewing the components of **Human Guide and Protective Techniques**, the intern:	☐ made *significant* errors in *accuracy, appropriateness, or detail.*	☐ was *inconsistently* accurate, appropriate, or detailed.	☐ was *consistently* accurate, appropriate, and detailed *but was unable* to tailor the standard techniques to meet the individual students'/clients' needs	☐ was *always* accurate, appropriate, and detailed *and was able* to tailor the standard techniques to meet the individual students'/clients' needs.
In terms of explaining, teaching, or reviewing the components of prerequisite (concept development), basic, or advanced **Orientation Skills**, the intern:	☐ made *significant* errors in *accuracy, appropriateness, or detail.*	☐ was *inconsistently* accurate, appropriate, or detailed.	☐ was *consistently* accurate, appropriate, and detailed *but was unable* to tailor the standard techniques to meet the individual students'/clients' needs	☐ was *always* accurate, appropriate, and detailed *and was able* to tailor the standard techniques to meet the individual students'/clients' needs.
In terms of explaining, teaching, or reviewing the components of **Cane Techniques**, the intern:	☐ made *significant* errors in *accuracy, appropriateness, or detail.*	☐ was *inconsistently* accurate, appropriate, or detailed.	☐ was *consistently* accurate, appropriate, and detailed *but was unable* to tailor the standard techniques to meet the individual students'/clients' needs	☐ was *always* accurate, appropriate, and detailed *and was able* to tailor the standard techniques to meet the individual students'/clients' needs.
In terms of explaining, teaching, or reviewing the components of travel in **Complex Environments**, the intern:	☐ made *significant* errors in *accuracy, appropriateness, or detail.*	☐ was *inconsistently* accurate, appropriate, or detailed.	☐ was *consistently* accurate, appropriate, and detailed *but was unable* to tailor the standard techniques to meet the individual students'/clients' needs	☐ was *always* accurate, appropriate, and detailed *and was able* to tailor the standard techniques to meet the individual students'/clients' needs.

In terms of explaining, teaching, or reviewing the components of **Street Crossings**, the intern:	☐ made *significant* errors in *accuracy, appropriateness, or detail.*	☐ was *inconsistently* accurate, appropriate, or detailed.	☐ was *consistently* accurate, appropriate, and detailed *but was unable* to tailor the standard techniques to meet the individual students'/clients' needs	☐ was *always* accurate, appropriate, and detailed *and was able* to tailor the standard techniques to meet the individual students'/clients' needs.
In terms of explaining, teaching, or reviewing the components of skills used with **Public Transportation**, the intern:	☐ made *significant* errors in *accuracy, appropriateness, or detail.*	☐ was *inconsistently* accurate, appropriate, or detailed.	☐ was *consistently* accurate, appropriate, and detailed *but was unable* to tailor the standard techniques to meet the individual students'/clients' needs	☐ was *always* accurate, appropriate, and detailed *and was able* to tailor the standard techniques to meet the individual students'/clients' needs.
In terms of **Promoting Participation** based on the students'/clients' skills or cognitive levels, the intern:	☐ ***did not*** promote students'/clients' participation or input.	☐ ***promoted*** students'/clients' participation or input, ***but*** the ***expectations*** for participation were ***not appropriate*** for the individual students/clients.	☐ ***consistently*** promoted students'/clients' participation or input ***and*** expectations for participation were appropriate ***most*** of the time for the individual students/clients.	☐ ***always*** promoted students'/clients' participation or input ***and*** expectations for participation were ***always*** appropriate for the individual students/clients.
In terms of **Fostering Self-Assessment Skills** by assisting students/clients to accurately reflect on what they learned and what areas still needed improvement, the intern:	☐ ***did not*** assist students/clients in developing self-assessment skills.	☐ ***attempted*** to assist students/clients in developing self-assessment skills ***but*** the ***level of assistance*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.	☐ ***consistently*** assisted students/clients in developing self-assessment skills ***and*** the ***level of assistance*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.	☐ ***always*** assisted students/clients in developing self-assessment skills ***and*** the ***level of assistance*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.

In terms of **Fostering Self-Advocacy Skills** by encouraging students/clients to communicate their individual needs and rights, the intern:	☐ ***did not*** foster self-advocacy skills and constantly interfered when students/clients had a need to interact with the public.	☐ ***attempted*** to foster self-advocacy skills, ***but*** the ***level of involvement*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.	☐ ***consistently*** fostered self-advocacy skills ***and*** the ***level of involvement*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.	☐ ***always*** fostered self-advocacy skills ***and*** the ***level of involvement*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.
In terms of **Facilitating Problem Solving Skills** by assisting students/clients to recognize when problems arise and to chose an appropriate solution to resolve the problem, the intern:	☐ ***did not*** facilitate problem solving skills and constantly provided the solutions when problems arose.	☐ ***attempted*** to facilitate problem solving skills ***but*** the ***level of facilitation*** was *not appropriate* based on the skill, experience, or readiness of the students/clients.	☐ ***consistently*** facilitated problem solving skills ***and*** the ***level of facilitation*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.	☐ ***always*** facilitated problem solving skills ***and*** the ***level of facilitation*** was *always* appropriate based on the skill, experience, and readiness of the students/clients.
In terms of **Facilitating Decision Making Skills** by assisting students/clients to determine which O&M techniques would be best used in certain environmental conditions, the intern:	☐ ***did not*** facilitate such decision making skills.	☐ ***attempted*** to facilitate such decision making skills ***but*** the ***level of facilitation*** was ***not appropriate*** based on the skill, experience, or readiness of the students/clients.	☐ ***consistently*** facilitated such decision making skills ***and*** the ***level of facilitation*** was appropriate ***most*** of the time based on the skill, experience, and readiness of the students/clients.	☐ ***always*** facilitated such decision making skills ***and*** the ***level of facilitation*** was ***always*** appropriate based on the skill, experience, and readiness of the students/clients.
Please sum values from the entire Standard Teaching Skills section:	**Column Total _____ (each box is worth 1 point)**	**Column Total _____ (each box is worth 2 points)**	**Column Total _____ (each box is worth 3 points)**	**Column Total _____ (each box is worth 4 points)**

Dimension 2: O&M Specific Skills Total Score _____

Dimension 3: Advanced O&M Instruction

Competency Skill	Levels of Performance			
	Score: 1	**Score: 2**	**Score :3**	**Score: 4**
In terms of visually and/or auditorily **Monitoring O&M Skills**, the intern:	☐ ***did not*** actively monitor the students'/clients' skills or the environment for safety reasons.	☐ monitored the students'/clients skills ***or*** the environment for safety reasons, ***but not both***.	☐ monitored the students'/clients skills ***and*** the environment for safety reasons ***throughout most*** of the lessons.	☐ ***always*** monitored the students'/clients skills and the environment for safety reasons.
In terms of **Positioning During Lessons**, the intern was:	☐ ***not*** correctly positioned during the lessons.	☐ ***inconsistently*** positioned correctly throughout the lessons based on the students'/clients' skill level.	☐ ***consistently*** positioned correctly throughout most lessons based on the students'/clients' skill level.	☐ ***always*** positioned correctly throughout all lessons based on the students'/clients' skill level.
In terms of **Recognizing Potentially Dangerous Situations**, the intern:	☐ ***did not*** recognize potentially dangerous situations during lessons.	☐ ***inconsistently*** recognized potentially dangerous situations ***but did not*** position himself/herself ***quickly*** enough to intervene ***appropriately***.	☐ ***consistently*** recognized potentially dangerous situations ***and usually*** positioned himself/herself quickly enough to intervene ***appropriately***.	☐ ***always*** recognized potentially dangerous situations in ***ample time*** to ***ensure*** the students'/clients' ***safety*** and ***position*** himself/herself to ***appropriately*** intervene.
In terms of **Intervening** due to students'/clients' frustration, disorientation, or for safety reasons, the intern:	☐ ***did not*** recognize when it was the ***appropriate*** time to intervene or ***responded***	☐ ***inconsistently*** recognized when it was the ***appropriate*** time to intervene ***and/or inconsistently*** responded appropriately based on the students'/clients' skill level or emotional state.	☐ ***consistently*** recognized when it was the ***appropriate*** time to intervene ***and consistently*** responded appropriately based on the students'/clients' skill level or emotional state.	☐ ***always*** recognized when it was the ***appropriate*** time to intervene ***and always*** responded appropriately based on the students'/clients' skill level or emotional state.
Please sum values from the entire Standard Teaching Skills section:	**Column Total _____ (each box is worth 1 point)**	**Column Total _____ (each box is worth 2 points)**	**Column Total _____ (each box is worth 3 points)**	**Column Total _____ (each box is worth 4 points)**

Dimension 3: Advanced O&M Instruction Total Score _____

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